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THE CULTURE HISTORY OF THE JEFFERSON MEMORIAL FOREST

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June 24, 2009

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This project could not have been completed without the assistance of many in the community. From the beginning, it became apparent that Jefferson Memorial Forest (JMF) had an impact on individuals, communities, families, and organizations throughout the area. Their perspectives helped to complete the project.

We would like to thank Jefferson Memorial Forest for providing information in their files. In particular, Mr. Adam King's interviews, articles, and summaries provided a foundation on which to build. Mrs. Victoria Caple Kaelin provided exceptional genealogical information on the Caple family, providing a perspective on those families that have lived in the area since frontier times. Residents surrounding JMF have also provided their perspective during public meetings in the Fairdale area. They not only gave us stories about families, historic structures, natural resources, and contacts, but their input also gave us a perspective on what attributes of the forest were important to them. In addition to these public meetings, an interview with Mr. Robert Lamkin provided a view of life on the western side of JMF. His information provided a perspective not only on his own family's methods of subsistence and daily rhythms but also a perspective on the Valley Station area. Mr. Paul Cox, previous Boy Scout and Assistant Ranger, provided personal stories and details on structures within the Horine Reservation. His interview provided the perspective of the importance of Jefferson Memorial Forest to many in the local community. In addition, his interview, as well as those with Scoutmaster Joe Rich and Eagle Scout Dave Withers, contributed to the realization that experiences at JMF were extremely important in the formation of their love of the outdoors. Mr. Kenny Karem provided much information regarding the Wilderness Jefferson County Organization and the contributions this organization made to JMF. This perspective also reinforces how vital it is to have a web of various groups supporting and working with JMF for the health of the forest.

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1
Introduction

The Jefferson Memorial Forest (JMF) encompasses some 6,191 acres of southern Jefferson County and northern Bullitt County of Kentucky. Known as the country's largest urban forest, it is located south of the Gene Snyder Freeway between Interstate 65 and Dixie Highway **(Figure 1**). It is a woodland tribute dedicated to the Kentucky veterans who have served our nation in time of war. However, the story of the area now known as the JMF extends back into the Native American prehistoric past and into the early Euro-American exploration and settlement of the region of the historic era. Long-term human landuse in the forest area has contributed significantly to its ever changing landscapes. Understanding these cultural landscapes means understanding all of the individual elements that comprise those landscapes. While much evidence of man's use and occupation of the forest area is visible today, some resources lie buried underground. Other information on the long history of this area exists only as treasured memories in the minds and hearts of those who once lived in the forest area.

This document offers an overview of the rich mosaic of people, places, and events that comprise the culture history of the JMF. The research for this document focused primarily on acquiring information that supplemented, rather than duplicated, that on file or otherwise known to the staff at the JMF. In particular, the research was guided by a "wish list" provided by Forest Manager Bennett Knox (02-01-2008), which included:

- Family histories;
- Names of original landowner(s) and extent of holdings;
- Location of cemeteries;
- Origin of place names (i.e. hills, streams, Keys Ferry, etc.);
- Property utilization in frontier times (logging, salt-making, farm crops, etc.);
- Stories of outlaws and other unsavory activities; and
- Boy Scout history.

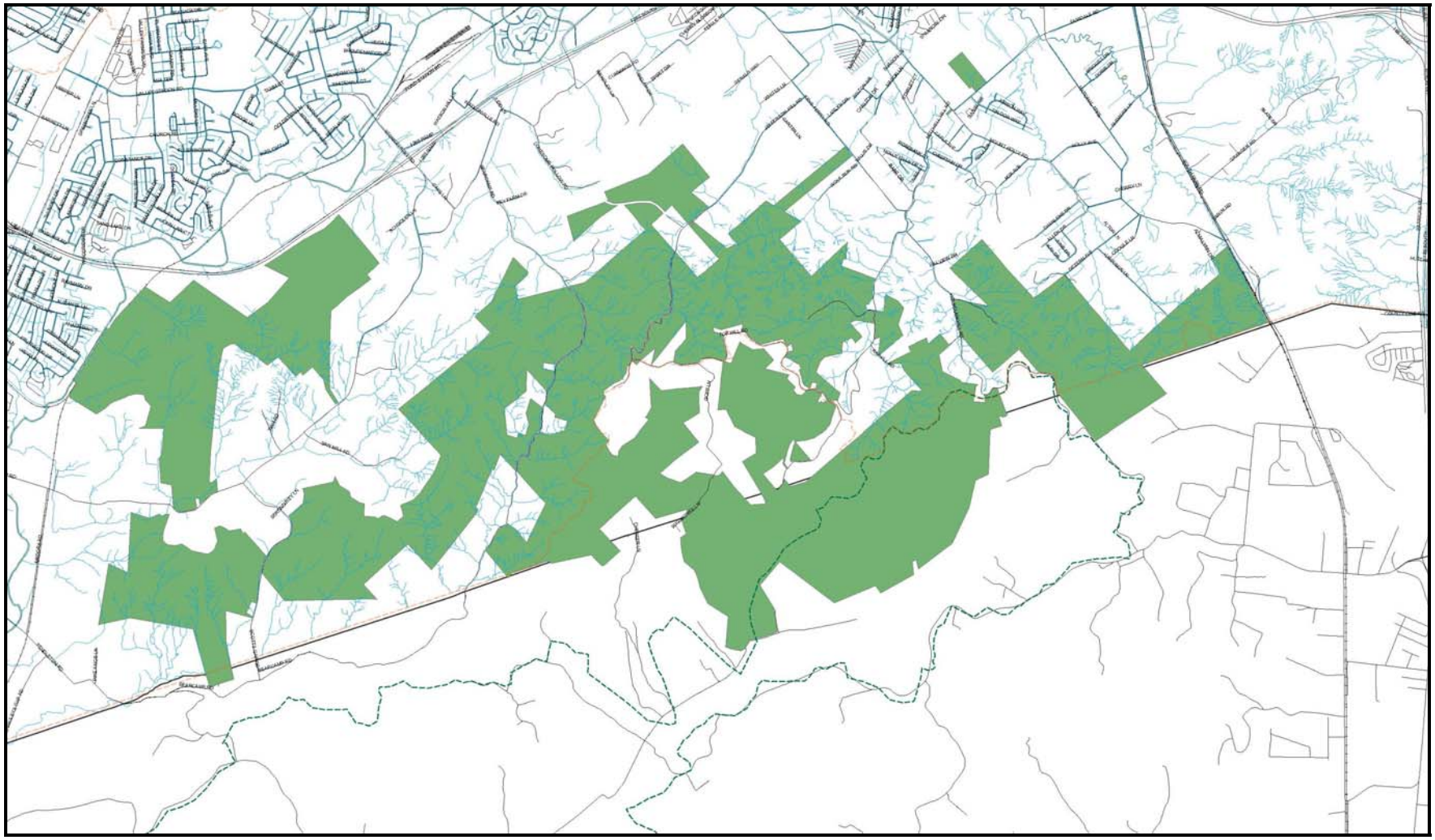
Because of scope limitations, the culture history presented here is only a beginning and should be viewed as a framework to build succeeding iterations of an ongoing story. The document begins with an outline of the environmental and cultural contexts of the forest area as it is currently understood (**Section 2**). This section also provides a brief discussion of the nearby communities, as well as the resident families who lent their names to places and features within the forest. **Section 3** focuses more directly on the history of the entity known as the JMF, including its formation and discussion on those individuals instrumental to its formation. In **Section 4**, a compendium of existing (that is, recorded with the appropriate state regulatory agencies) data on the above-ground and below-ground cultural resources of the forest is provided. In particular, a discussion of the numerous cemeteries is presented. In keeping with the memorial nature of the JMF, this section lists some of those veterans who fought in the various wars over time and their burial places in and around the forest. The final section, **Section 5**, offers some recommendations on potential opportunities to further investigate the forest for cultural resources and to interpret its rich history for the public.

Referenced Resources

During the course of this research, a number of primary and secondary sources were examined for information regarding the history and prehistory of the area that is now known as the JMF. The official website of the JMF presents a bulleted timeline of the significant historical milestones of the formation and development of the forest from its beginnings in the mid-1940s to the present (see http://www.memorialforest.com/history/default.html). In addition to this resource, the following sources of information were researched:

- Information filed at the JMF
- Louisville Free Public Library
- Filson Historical Society
- Jefferson County Archives
- Louisville Metro Historic Landmarks and Preservation Districts Commission
- Louisville *Courier-Journal*
- Other local newspaper articles
- Office of State Archaeology
- Published books and journal articles
- Internet sources
- Early and historic maps
- USGS topographic maps
- Census Records
- Genealogical data
- Personal interviews
- Old photographs

Figure 1. The Jefferson Memorial Forest.



2
Environmental and Cultural Contexts

The study of prehistoric and historic cultures extends beyond examination of the actual material remains of a society to understanding the ways in which that society interacted with its environment. Throughout time, the natural landscape has influenced human use, and was in turn affected by that use. This interrelationship is reflected in both the natural and cultural (standing structures, cemeteries, archaeological sites) resources of the area.

The cultural landscape approach provides a framework for understanding the entire landuse history of a property. It is the foundation for establishing a broader context for evaluating the significance of cultural resources, because the significance of any given cultural resource is not determined in isolation. Rather, it is achieved by examining the entire context of the landscape and interrelationships among its constituent components.

The cultural landscape approach attempts to identify linkages between cultural and natural resources. It is based on the analysis of the spatial relationships between natural and human features on the landscape. By looking at the distributions of cultural resources and their correlation with environmental factors such as landform, vegetation, drainage, etc., patterns in the locations of these resources can sometimes be defined. These patterns can then provide for more efficient management of cultural resources by better predicting where such resources are likely to occur.

Environmental Context

The physical environment is one of many factors that influenced the cultural development of an area. An awareness of the natural setting and available resources of an area allows informed interpretations of cultural issues such as settlement patterns and sedentism, as well as resource utilization and exploitation. The following environmental context provides data on regional ecological patterns such as floral distributions and communities, regional geomorphology, soils, and hydrology. An understanding of the natural setting of an area allows informed interpretations on such cultural issues as prehistoric/historic settlement patterns, resource availability and exploitation, and more. The discussion is aimed at identifying those aspects of the natural environment that may have influenced the cultural development of the JMF.

Regional Geomorphology

The present drainage pattern of the Ohio River and landforms occurring within it can largely be attributed to the encroachment of continental ice sheets during the Pleistocene period. A total of four major incursions of continental ice occurred into what is now Ohio and Indiana, followed by a retreat and the subsequent pulse of glacial outwash. The Ohio River served as the main meltwater drainage within the region, funneling substantial amounts of sediments into the Lower

Mississippi valley from the glacial front. Each advance eroded or obscured deposits left by previous advances modifying the existing terraces and drainage pattern. Deposits dating to early incursions and pulses rarely are identified along the upper reaches of the Ohio, due to excessive reworking and erosion. Thus the final glacial pulse, known as the Wisconsin, has left the most enduring mark on the geomorphology of the Falls of the Ohio region. The Wisconsin stage occurred between 132,000-10,000 years before present (BP) and can be divided into several substages. Richmond and Fullerton (1986) proposed glacial advances occurring approximately 22,500 BP, 16,000 BP, 15,000 BP and 13,000 BP, with interglacial cycles occurring after each advance. It is these late Wisconsin stages that have created the greatest deposits within the greater Falls of the Ohio River (hereafter Falls) region.

The Ohio River throughout the Late Wisconsin stage maintained a braided channel due to the prodigious amounts of sand and gravel sediments choking the river. The Miami and Whitewater rivers provided the greatest amount of this sediment within the local region. The glacial outwash deposited large amounts of unconsolidated gravel to clay-sized sediments across the broad 8 km valley bottom around the Falls area throughout the Pleistocene period. Successive downcutting events and newer deposits of sediment closed off the sloughs and small tributary valleys that existed in the braided deposits of the main Ohio River valley. Silt and clay choked tributary valleys and sloughs filled up with water, creating a series of ponds and small lakes across portions of the river valley. These ponds and resulting wetland areas persisted within the area up into the late nineteenth century, which in the majority were filled in for development or health reasons. In addition to the lacustrine deposits substantial deposits of windblown loess have been noted within the Falls area. These loess deposits range in thickness from 1 m to up to 10 m in some areas across the valley (Gray 1979). Gray (1979:897) believes that this period of loess development marked an equilibrium, in which the river only slightly degraded the valley fill while extensively reworking the surface of the deposits. Radiocarbon dates taken by Kepferle (1974) date this period of equilibrium at approximately 19,000 years ago.

The resumption of ice advances from 16,000 and 15,000 BP caused a new period of incision and erosion of the existing Pleistocene sediments. These later ice advances and subsequent pulse of outwash lessened, resulting in a change within the Ohio River's flow regime. The new flow regime had less discharge, far less sediment load, and seasonal high water in the winter and early spring rather than all through the growing season, these factors probably contributed to changing stream characteristics (Gray 1979:897). Although not known specifically, the Ohio River probably changed from a braided stream to a meandering flow regime sometime after 15,000 years ago in the area of the Falls Region.

The change to a meandering flow regime marks a period of downcutting by the Ohio River. The river began to incise its floodplain removing up to 10 m of outwash sand and gravel from the active portions of the floodplain (Gray 1979:897). As easily erodible sediments were removed from the active floodplain, the Ohio began to course much as it does now, seasonally overtopping its floodplain, and, during extreme floods, excavating its valley almost to bedrock (Gray 1979:897). The Ohio slowly began to move as climatic and sediment load amounts shifted over the next 10,000 years. These movements of the main channel were initiated by the development of a channel or point bar.

Physiography

The Knobs. Much of Jefferson County lies within the Outer Bluegrass division of the Bluegrass physiographic province (**Figure 2**). The eastern part of Jefferson County is rolling to hilly. The central and northern parts are a tableland of low relief except adjacent to principal drainage lines. The southwestern corner of the county, however, is located in the Knobs physiographic area adjacent to Muldraugh Hill (McGrain and Currens 1978: 41). The highest elevations in the county occur along the Muldraugh Hill Escarpment and range from 902 to 800 feet (275 to 244 meters) AMSL. The lowest elevations occur along the principal drainage of the county: the Ohio River. Elevations along the Ohio River's floodplain range from 383 to 440 feet (117 to 134 meters) AMSL.

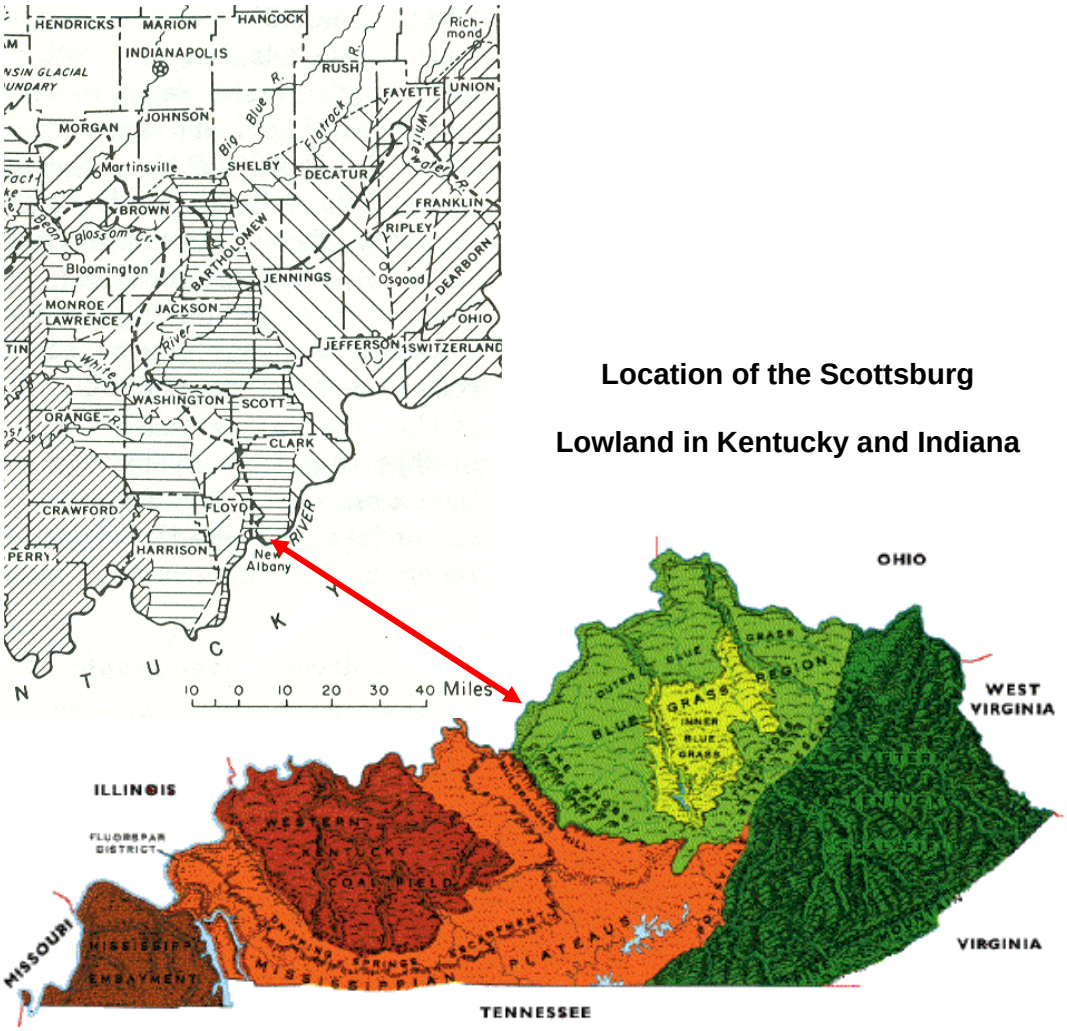


Figure 2. Physiographic maps of Kentucky and Indiana showing area of Scottsburg Lowland.

The Knobs Physiographic province in which the JMF lies is an arcuate band of erosional remnants severed from the surrounding Mississippian limestone plateau by the inland saltwater sea during the Devonian. Knobs in Jefferson County can be as high as 320 feet above adjacent valley floors, which vary in elevation from 460 to 500 feet AMSL (Burroughs 1926) (**Figure 3**). The knobs in the forest range in elevation from 751 to 877 feet AMSL. In comparison to the rest of the Knobs band to the east, these are the lowest elevations of knobs; highest knob elevations are to the east along the Pottsville Escarpment (Burroughs 1926; UK 2007).

Figure 3. View of the Knobs rising above the flat interior lowland.

The Scottsburg Lowland. Just north of the Knobs region, eastern Jefferson County slopes rapidly towards the west forming a broad lowland flat at 500 feet AMSL that is known in Kentucky as the Scottsburg Lowland (McFarlan 1943:172). This continues northward across the Ohio River and into Indiana. Historically, this area of Kentucky was called the Wet Woods. The Wet Woods played a significant role in the history of Fairdale and the area that would become the JMF. For that reason, it is also discussed here.

The Scottsburg Lowland has been ranked by some as a subdivision of the Bluegrass physiographic province, similar to the Outer Bluegrass division (Gunn 1966:5). Because the Scottsburg Lowland covers such a small area in Kentucky, it was never given province status.

Physiographically, the Scottsburg Lowland is a southern extension of the Indiana regional unit of the same name (**Figure 4** and **Figure 5**).

> *The western edge of the Muscatatuck regional slope merges rather imperceptibly into a lowland of slight relief characterized by great expanses of valley land along the streams and a notable lack of bluffs or steep slopes. This lowland lies between the Muscatatuck regional slope on the east and a well defined escarpment* [Knobstone] *on the west, and extends from southeastern Johnson County* [Indiana] *southward into Kentucky* (Malott 1922:88).

The Scottsburg Lowland is described as a "local" peneplain developed on the New Albany and overlying (New Providence) shales that were somewhat aggraded by glacial outwash (McFarlan 1943:173). At its northern end, in Indiana, the lowland has been somewhat obscured by glacial drift as much as 150 feet thick. To the south, however, the drift is thinner.

> *The low, flat land 3 to 5 miles wide between the river and the knobs southwest of Louisville is an old glacial flood plain of the river, as is also the narrow strip of flat land along the river northeast of Louisville. Both these areas have been somewhat reduced and modified by recent erosion, the shallow valleys of Mill Creek, and its tributaries being the most important of the modifications (*Butts1915:22*).*

In general, the valleys of the Scottsburg Lowland are very broad and flat, and local relief is rarely great, seldom exceeding 75 feet (Malott 1922:90).

> *Where the Ohio River crosses the Scottsburg Lowland, the valley is open and several miles in width, and is quite in contrast to the narrow valley and high rocky bluffs either up or down the river from the lowland. Yet it is in this broad portion of the river valley across the lowland that the only stretch of bed-rock is to be seen entirely across the channel* [of the Ohio River]*, and over which occurs the "Falls of the Ohio" where a descent of about 23 feet is made in little over 2 miles (Malott 1922:91).*

The Scottsburg Lowland occurs in two separate areas of Jefferson County. The main body lies between the Muscatatuck Regional Slope and the Knobstone Escarpment in the southern part of the county and adjacent Bullitt County. A smaller, second area of the lowland is situated within the Muscatatuck Regional Slope centered near the city of Lyndon in the northeastern portion of the county. This area is approximately three square miles in size.

The flat, wet nature of this area is due to the fact that it is underlain by New Albany shale, that is *a black, fissile, carbonaceous shale that is highly impervious and erodible* (Jones 1978:1). It is formed on bedrock and weathers into a "watertight clay soil which results in problems with infiltration rates, an increase in runoff of precipitation, drainage and flooding problems" (Jones 1978:1). Consequently, it is poorly drained and holds water for much of the year.

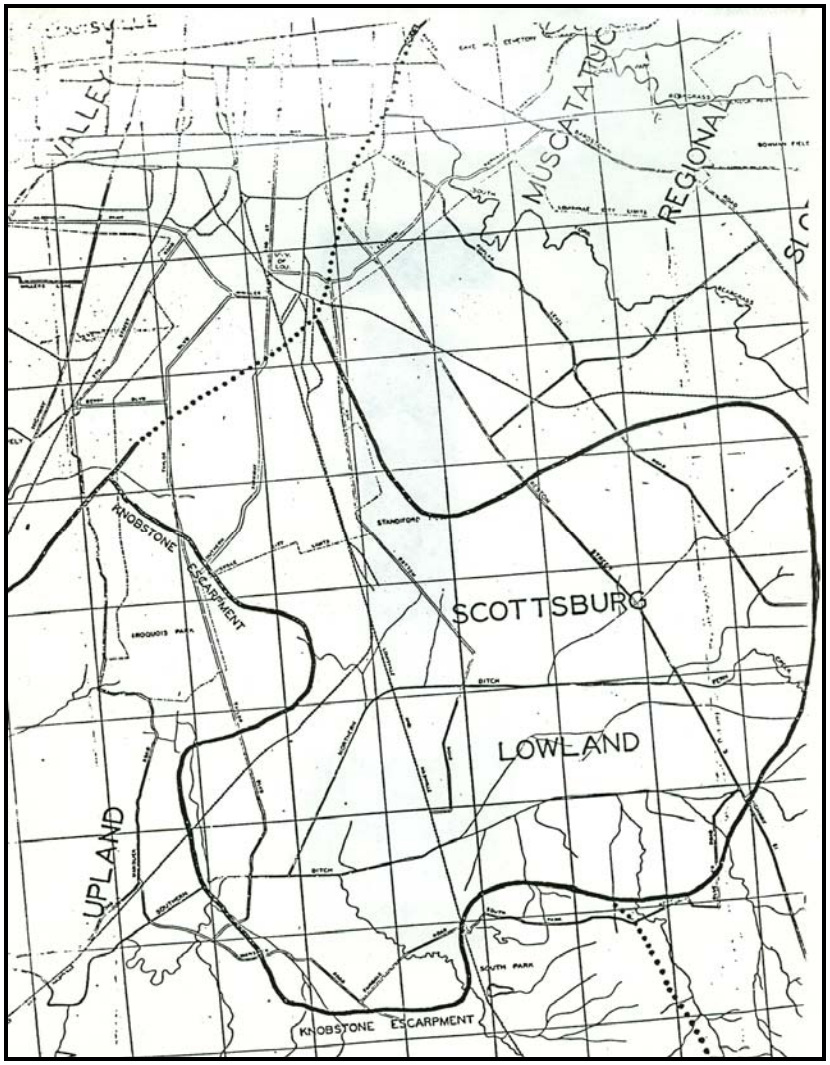


Figure 4. From: Progress Report on the Ground-Water Resources of the Louisville Area, Kentucky.

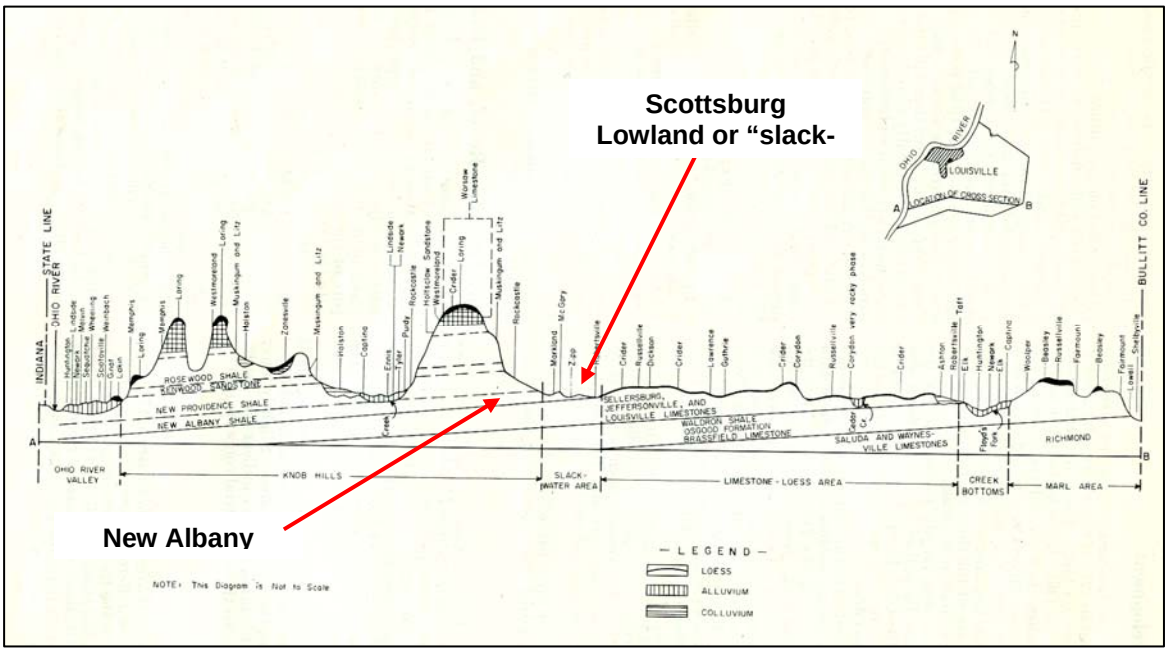


Figure 5. Adapted from Zimmerman 1966:130.

Drainage

The southwestern portion of Jefferson county is drained by Pond Creek, a tributary of the Ohio River. Pond Creek drains a total of 126 square miles, including the Scottsburg Lowland, an area known historically as the "Wet Woods". Within the forest itself, a drainage divide runs along Jefferson Hill and Top Hill Road. West and south of this divide lay a number of broad valleys. These valleys generally lay outside the boundaries of the forest, yet these are the areas that would have sustained the largest, most permanent sites of prehistoric and historic populations. Streams here drain westward into Pond Creek and thence to the Ohio River. They include Cane Run, with its unnamed tributaries into Dillon Hollow and Rearden Hollow; Brier Creek, with its unnamed tributaries, one of which runs through Headley Hollow; and Knob Creek, with its larger tributaries of Sugartree Run and Claybank Creek. East of the divide, the drainage system is different. Although stream headwaters lie in constrained, V-shaped ravines within the forest, they flow out onto the more gradual gradient of the Outer Bluegrass (Scottsburg Lowland). These include Bearcamp Run, which flows northward; Salt Block Creek, which flows northeastward along Jefferson Hill Road; and the headwaters of Bee Lick Creek. Salt Block Creek flows into Bee Lick, which flows into a channelized tributary of Pond Creek.

The JMF lies just adjacent to, and just south of, the "slack-water" or Wet Woods area (as described above) of Jefferson County. Numerous creeks fed into the Wet Woods, specifically Duck Springs Branch, Greasy Creek, Blue Spring Branch, Fern Creek, Fishpool Creek, McCawley's Run, and Wilson's Creek. Early maps show the Wet Woods area to be dominated by a large pond named Oldham's Pond (**Figure 6**). This timbered pond, or swamp, was larger in the winter and wetter seasons; the more northeasterly portion of it was drier (presumably more shallow) at other times of the year. A plank road was built across the swampy area. Two large islands were located in this swamp. The smaller one was named Lost Island, and the larger one Big Island. (See more detailed discussion of this in **Section 3** of this report).

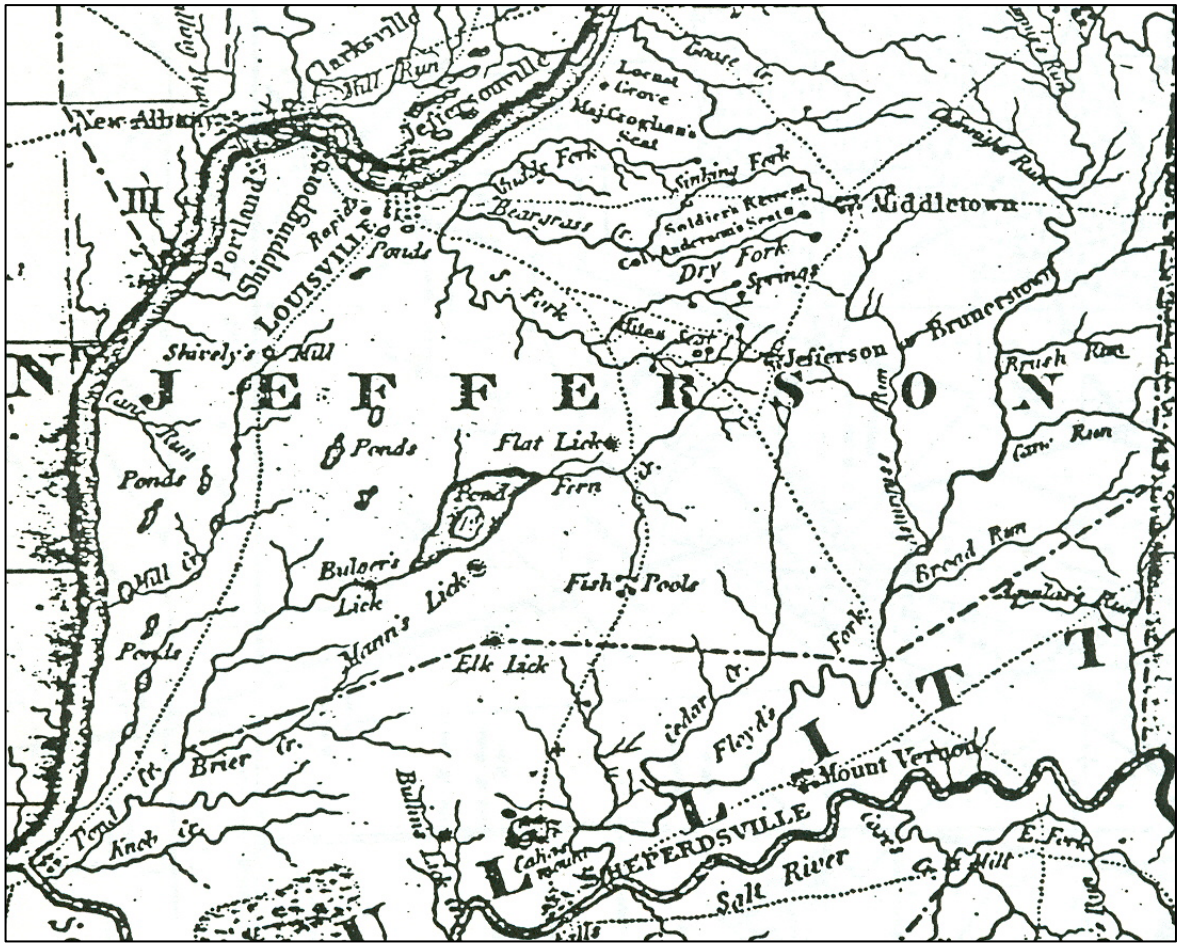


Figure 6. Filson's Map of Kentucky (1819).

During the twentieth century, significant changes occurred in the drainages of Jefferson County. Standing-water ponds in Louisville and surrounding county were drained and filled as public nuisances and smaller knolls were leveled and used as the source of that fill. The small streams in the area have now been channelized and straightened, and deeper drainage ditches created. The Southern Ditch is the principal of these structures. Today the large Oldham Pond depicted on the early maps and the remaining low-lying areas of this portion of Jefferson County have been filled in due to the longstanding and intensive expansion of the city of Louisville to the north. However, the area is still generally low and wet holding water during especially heavy rains (**Figure 7**).

Figure 7. Low wet ground in the JMF vicinity.

Geological Resources

The hardrock geology of Jefferson County consists of alternate layers of limestone, sandstone and shale, all of which range from a few feet to several hundred feet in thickness. Geologically, the Scottsburg Lowland is a strike valley, that is, “a lowland belt controlled by the structure and lithology of the underlying bedrock formation” (Schneider 1966:45). The strike valley follows the outcrop belt on non-resistant late Devonian and early Missisippian shales. The elevation of the trough is 750 feet AMSL in the north in Indiana and 500 feet AMSL nearer the Ohio River (Schneider 1966:45). The majority of the strata within the Falls of the Ohio area have a slight tilt toward the southwest, exposing different formations at progressively higher levels (**Figure 5**). Jefferson County, Kentucky, and eastern Clark and Floyd counties in Indiana have exposed surface geology dating to the Silurian and Devonian ages. As the tilt of the geology increases to the west, these older strata are covered by later Lower Mississippian-aged strata in western Clark and Floyd counties and all of Harrison County, Indiana, as well as western Bullitt and Meade counties in Kentucky. The Silurian aged deposits exist along the uplands of Eastern Jefferson County, Kentucky and Clark County, Indiana. These deposits consist of Louisville, Sellersburg and Jeffersonville Limestones, as well as Waldron Shale (McDowell 1986). Devonian-aged rocks dominate the area around the Falls; the majority of which have been covered by Pleistocene gravels both south and north of the Falls proper. The Scottsburg Lowland area of central Jefferson County is underlain by New Albany shale. New Albany shale is limited in areal distribution to the southwestern one-third of the county except for a patch of about three square miles in the vicinity of Lyndon where a thin veneer of the shale is present. It underlies the Knobs region and the Ohio River alluvial flats. The far western portions of Clark and Floyd counties, Harrison County Indiana and far western Bullitt and Meade counties in

Kentucky are dominated by younger Mississippian aged rocks. The two most important to prehistoric archaeology are the Ste. Genevieve and St. Louis limestone formations, both of which contain large amounts of high-quality chert. The surrounding region possesses a plethora of different cherts within the various limestone formations. A number of these chert types have been identified within current or previous archeological investigations of the county.

Quaternary Deposits. Deposits dating to the Quaternary period include alluvial deposits in the valleys as well as loess caps on the uplands (USDA 2008).

Mississippian Units. The distinctive physiography of the knobs province is due to its structural geology, most importantly the resistant cap of Mississippian Harrodsburg Limestone that usually outcrops at elevations 870 feet AMSL or higher (USDA 2008). Although many cliff-making formations in the eastern U.S. are due to resistant sandstones or quartzites, the Harrodsburg Limestone is resistant due to the high proportion of chert within the formation. This chert is visible on spots of erosion on many upland trails in the forest, particularly surrounding Tom Wallace Lake.

Beneath this formation is the Mississippian Borden Formation, which includes four members. Between 780 and 870 feet AMSL, the Muldraugh and Holtsclaw Shale members lie. These are less resistant to erosion and form lower topography among the Harrodsburg cap (USDA 2008). Chert within the Muldraugh member is known as Muldraugh or Knobs chert. This chert is buff to yellowish brown in color that becomes pink when heated. Fossils present in Muldraugh chert include “sponge spicules and old worm burrows” (DeRegnaucourt and Georgiady 1998:150). DeRegnaucourt and Georgiady have also found that Muldraugh chert was used mostly during the Archaic periods and most rarely during the Paleoindian period.

Most of the lithic material analyzed by Wohlgemuth during the ULAS 1981 survey of JMF was identified as either Muldraugh (Muldraugh Mottled) or Harrodsburg Limestone (Muldraugh Coquina) chert. Both were found to be abundant in local streams, suggesting to Wohlgemuth that these would have sufficed as procurement locations. Wohlgemuth states: “…by far the most easily obtained chert was recovered from streambeds, both those of main creeks which flow through valleys and their tributaries which dissect the knolls and ridges.” In addition, “the chert gravels in streambeds tend to be more homogenous in structure and are a size convenient for manufacture into preforms or tools without much reduction”. One source for the Harrodsburg Limestone chert was found to be the bedload of Knob Creek. He goes on to state that “both chert types were represented in streambeds, while in the western half, only the Muldraugh Mottled chert was present.”

The Muldraugh chert identified by Wohlgemuth (1982) as Muldraugh Mottled was described as follows:

> *This chert is moderately coarse grained, the majority of which is colored pale yellowish brown (10YR 6/4) with lighter mottles (10YR 7/2). The range of colors include graying brown/mottled (10YR 5/2-10YR 8/2), to very pale orange (10YR 8/2) and various shades of red. The chert occurs in beds continuously in sometimes thick (25 cm) layers and irregularly in discontinuous, anastomizing (netlike) deposits (Kepferle 1972). In southwest Jefferson County the Muldraugh may be up to 20 meters thick (Ibid). This unit corresponds to the Floyd’s Fork Formation of Indiana which also contains this chert type.*

In contrast to the Muldraugh Mottled chert, the Harrodsburg Limestone chert was described by Wohlgemuth (1982) as follows:

> *The Harrodsburg Limestone (formerly the Warsaw of McFarland), caps the Knobs in the eastern half of Jefferson County Forest and is bedded in a 7.6-12.8 meter thick layer. This unit has its equivalent in Indiana as the Guthrie Creek and Leesville Members as described by Stockdale (1931). Kepferle, in his description of the Harrodsburg, calls this chert type silicified limestone. This chert type is very fossiliferous ("coquina") and contains abundant crinoids fragments. Natural colors of the predominate hues are very pale orange (10YR 8/2), medium gray (N5), to pale brown (10YR 6/3).*

During heat treatment experiments by Wohlgemuth, it was found that Muldraugh Mottled exhibited a color change from 10YR 5/3 or 10YR 6/6 to 10R 5/26 or 10R 5/6, respectively at 200°C. In contrast, the Harrodsburg Limestone chert changed from a 10YR 6/3 or 10YR 6/2 to 10R 5/3 or 5/2 at 300°C. Dull varieties of these cherts did not become more lustrous despite heating to 700° to 800°C. Examples that already exhibited a luster exhibited color change at lower temperatures; knapping qualities did not seem to be affected, leading Wohlgemuth to conclude: "it is doubtful that Muldraugh cherts were intentionally heat treated and any chert sample from sites which exhibit heat induced change result from unintentional exposure to fire".

Another study documented the use of these Muldraugh cherts at four sites encountered during the construction of the Ohio River floodwall northwest of the forest (Collins et al. 1979 in Wohlgemuth 1982). Analysis of all lithic materials from these four sites documented initial and primary reduction of Muldraugh cherts at these locations. Muldraugh cherts comprised the largest percent of all chert types (60%); of all the Muldraugh chert, initial reduction and primary flaking accounted for 89% of all the debris.

Analysis of chert types at the more distant Prather Site in Clark County, IN present one example of how Muldraugh chert was used in the region during the Mississippian period (Cantin 2006). Muldraugh was not recovered in large quantities (0.4 percent of total types represented in manufacturing debris). Of the Muldraugh flakes recovered, however, a larger proportion of all Muldraugh flakes (0.8 percent) were modified compared to unmodified (0.1 percent), suggesting only finished tools of Muldraugh were brought to the site.

In addition to these chert-bearing deposits, shale barrens in the forest may lie upon the Nancy Member. The Nancy Member forms broad ridgetops from 750 to 900 feet AMSL (USDA 2008). Other members with shale components include the New Providence Shale Member and Kenwood Siltstone, which lie from 470 to 750 feet AMSL. These members also include siltstone and limestone components.

Devonian Units. Underlying the valleys lie New Albany Shale or Beechwood Limestone Members (USDA 2008). New Albany shale is highly carbonaceous. Butts (1914:132) reported that fishermen often heated themselves by burning the shale:

> *The black color is chiefly due to a carbonaceous material which is present in such quantity as to burn upon liberation by heating the shale (* Butts 1914:132).

Soils

Soils across the forest may be most broadly compared by their parent material—those that developed from Quaternary deposits, those that developed on the uplands from Mississippian formations, and those that developed in the valleys from Devonian formations.

Quaternary Parent Material. Quaternary parent material includes loess capping the uplands, and alluvial deposits of the stream valleys. Substantial deposits of loess (windblown silt) have been noted within the Falls area. These loess deposits range in thickness from 1 meter to up to 10 meters in some areas across the neighboring valleys (Gray 1979). Gray (1979:897) believes that this period of loess development marked an equilibrium between glacial ice ages. Radiocarbon dates taken by Kepferle (1974) date this period of equilibrium at approximately 19,000 years ago. Since that time, alfisols and ultisols such as the Nicholson silt loam have developed from these Pleistocene loess deposits located on the knobs of Jefferson Memorial Forest (USDA 2008).

Much more recent alluvial deposits have resulted in alfisols or entisols such as Nolin or Boonewood silt loams (USDA 2008). In addition to alluviation, soils in the lowlands probably received significant infusions of sediment during periods of historic logging activity in the uplands.

Mississippian Parent Material. From the uppermost formation, the Harrodsburg Limestone, Caneyville soils develop. Soils that develop from the Borden Formation include Carpenter and Gilpin soils from the Muldraugh and Holtsclaw members, Gilpin and Tilsit soils from the Nancy Member, and Gilpin and Weikert soils from the Kenwood Siltstone and New Providence Shale Members. All are strongly acidic to very strongly acidic and thus have a very low potential for good preservation of archaeological deposits (USDA 2008).

Devonian Parent Material. Series such as Caneyville, Crider, and Nicholson develop from the New Albany Shale and Beechwood Members of the valleys.

Climate

Jefferson County lies within Udic moisture regimes, defined as 90 consecutive days of moist conditions within the soil profile (Buol et al. 1989; USDA 2008). In contrast to the Ustic moisture regime to the west that supports wheat, the Udic moisture regime of the eastern US can support corn. Within recorded history, average annual precipitation for the forest is 113 centimeters (44.41 inches); 59 percent of this falls between April and October. The greatest one-day rainfall on record (7.22 inches) occurred in March of 1997. In the summer, the average temperature is 75.9°F. The daily average temperature is 85.9° F, however, and extremes can be as high as the 106°F that occurred in July of 1999. In the winter, the average temperature is 34.8°F, the average daily minimum is 26.1°F, and the most extreme temperature on record is -22°F, which occurred in January of 1994. The average snowfall is 17.4 inches. The greatest one-day snowfall on record is 15.5 inches, which occurred in January of 1997, and the greatest depth overall (19 inches) occurred in January of 1978. As the greatest one-day snowfall and the greatest one-day rainfall both occurred in the early months of 1997, extensive flooding would be expected and occurred in the first week of March 1997.

Climate fluctuations, however, have varied from these ranges throughout the Earth's history. According to the Milankovich model, these periodic fluctuations are caused by changes in the

Earth's elliptical orbit every 100,000 years, its quivering spin on its axis every 21,000 years, and its tilt on its axis every 41,000 years (Selby 1985:510). At times, these fluctuations may co-occur and major climate changes are recognized.

In addition to fluctuations due to the Earth's movement, climatic patterns are affected by variation between air masses as well as gases and particulate matter from increased volcanism (Zielinski et al. 1994). Differential warmth and pressure of air masses are responsible for oceanic patterns in the Atlantic Ocean (North Atlantic Oscillation) and Pacific Ocean (El Nino-Southern Oscillation), both of which influence North American climate. Wet, mild winters along the Atlantic coast result from a positive NAO, whereas colder winters with more snow result from a negative NAO (Riedel 2008). The El Nino—Southern Oscillation (ENSO) influences climate across North and South America but was absent from 6900 to 3800 B.C. After 3800 B.C, when the ENSO stabilized, cultures throughout the Pacific Basin became more complex. From Japan to Peru to the Northwest Coast, enhanced social networks and monumental works developed (Sandweiss et al 1999). This climate pattern also may have had an influence on the development of the Middle to Late Archaic transition (around 3000 B.C.) in the Ohio River valley.

These as well as other influences have resulted in glaciation, extended cold periods such as the Little Ice Age, and warm periods such as the Hypsithermal and Medieval Warm Period. The amounts of precipitation have been both higher and lower than today's average. In addition, as with any system, all these variables influence one another. Climate changes that have occurred since the Wisconsinan glaciation are summarized in **Table 1**.

Table 1. Some Major Climate Fluctuations over the Past 10,000 Years

Years BP	Fluctuation	Event	Source
6200-2500 B.C.	1° to 2.5° C warmer drier prairie expands	Hypsithermal, Altithermal, Climatic Optimum	Buol et al. 1989:180; Selby 1985
B.C. 1000-800 A.D.	1° to 2°C cooler wetter		Buol et al. 1989:180; Selby 1985
900-1200 AD	warmer droughts	Medieval Warm Period	Buol et al. 1989; Fagan 2000
1300 AD	cooler	Little Ice Age	Fagan 2000
1600 AD	warmer		Buol et al. 1989
1700 AD	cooler		Buol et al. 1989

Glaciation. Prior to glaciation, the Salt River to the south of the project APE would have been the major waterway for this portion of Kentucky. During glaciation, biotic communities changed to taiga and other subarctic communities. Vegetation would have included pines, fir, hemlock, and spruce. As the glaciers retreated, a forest of hackberry and ironwood replaced the northern species until more temperate deciduous species returned from their separate refugia to the south and east (Delcourt 2002).

Biological Resources

Floral Resources. As the glaciers retreated farther north, average temperatures rose and the mixed hardwood forests in south central Kentucky were gradually replaced by Oak-Hickory forests. By 5,000 years ago, the transition was complete (Delcourt and Delcourt 1981).Oak-Hickory Forests would have been found in warm exposed areas, and Beech-Maple Forests would have occurred in cool, moist shaded areas, and along streams and river valleys Northern Riverine Forests would have been present (Kricher 1988:72).

Oak-Hickory Forests commonly contain a wide variety of flora. The trees that may have been present prehistorically include oaks, hickories, American chestnut, dogwood, sassafras, hop hornbeam, and hackberry. Tulip trees, elm, sweetgum, shagbark hickory, and red maple also may have been present, especially in moist areas. The understory may have contained mountain laurel, a variety of blueberries, and deer berry among other plants. Herbs may have included wintergreen, wild sarsaparilla, wood-sorrel, mayapple, rue-anemone, jack-in-the-pulpit, and trout lilies to name a few (Kricher 1988:57). Today, along the tributaries of the Ohio River, are stands of cottonwood, sycamore, soft maple, black willow, gum, and elm. On inland terraces, white oak, black oak, yellow poplar, hickory, beech, and hard maple predominate. On the drier portions of the area maple, oak, sweetgum, tupelo, sassafras, black locust, and ash occur. The American chestnut, a common species during prehistoric times as a canopy tree, has been reduced to an understory tree by a blight introduced into North America in historic times (Kricher 1988:58). Numerous grasses and perennials such as smartweed, goosefoot, and amaranth are found in areas that are not farmed. Many of these species were present prehistorically and were utilized to various degrees as food, construction and material, fuel, and fiber.

Ecological communities defined by the Resource Management Plan (JMF 1995) included the following: 1) acidic mesophytic forest in the lowlands, 2) acidic subxeric forest commonly on the sideslopes, 3) acidic xeric forest commonly on the peaks and ridgetops, 4) pine-oak forest, and 5) shale barrens. Plants associated with each type may be found at the JMF (1995). Resources within these communities important to cultural groups are summarized in **Table 2**.

Table 2. Resources within Ecological Communities Important to Native Americans

Community	Name	Scientific Name	Use
Acidic mesophytic	sugar maple	*Acer saccharum*	edible (sap)
	American beech	*Fagus grandiolia*	edible nut
	shagbark hickory	*Carya ovata*	edible nut
	pignut hickory	*Carya glabra*	edible nut
	persimmon	*Diospyros virginiana*	edible fruit
	black walnut	*Juglans nigra*	edible nut
	American plum	*Prunus americana*	edible fruit
	paw paw	*Asimina triloba*	edible fruit
Acidic subxeric	pignut hickory	*Carya glabra*	edible nut
	mockernut hickory	Carya tomentosa	edible nut
	persimmon	*Diospyros virginiana*	edible fruit
	American plum	*Prunus americana*	edible fruit
	sassafras	*Sassafras albidum*	
	paw paw	*Asimina triloba*	edible fruit
Acidic xeric	lowbush blueberry	*Vacinnium vacillans*	edible fruit
	highbush blueberry	*Vacinnium vacillans*	edible fruit
Pine-oak	lowbush blueberry	*Vacinnium vacillans*	edible fruit
Shale barrens	sunflower	*Helianthus*	edible seed
	highbush cranberry	*Vaccinium arboretum*	edible fruit
	lowbush cranberry	*Vaccinium vacillans*	edible fruit

According to conclusions made by Delcourt and Delcourt (1997) and Lorimer (2001), however, the present and predicted forest types may not have existed in the project area during prehistoric times due to intentional landscape modification by Native Americans. Fire was used to clear bottomland for agriculture, to create habitat for meadow or edge-dwelling species, and to clear the underbrush surrounding a settlement. Another activity practiced by native groups was the tending of patch resources such as river cane (*Arundinaria gigantea*) (**Figure 8**). This species is evident at the project area today, and, as proposed by Delcourt (2002), could be a relic community of cane tended by Native American groups. Grasses and sedges would have been important to Native American groups for use as cordage, nets, baskets, and mats.

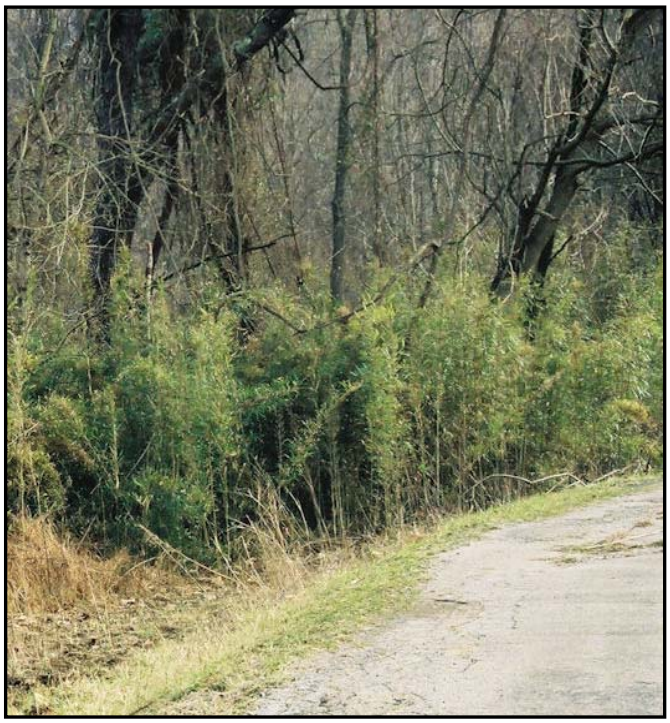


Figure 8. Stand of river cane.

In addition to river cane (*Arundinaria gigantea*), Delcourt (2002) suggests Native Americans may have tended stands of mast resources as well. These resources might have included hickory, walnuts, butternuts, and acorns. Within Jefferson Memorial Forest, these would have been present in the acidic mesophytic and acidic subxeric forests, which occur on sideslopes and bottomlands.

Some of the most important botanical materials to native populations were the weedy plants that grew in the disturbed soil surrounding their camps. These were gathered for many years and, as a result, became domesticated. They are summarized in **Table 3**.

Table 3. Indigenous Plants that Became Domesticated by Prehistoric Native Americans

Plant	Early Date	Site	Source
marshelder/sumpweed (*Iva annua*)	4000 BP	Napoleon Hollow, IL	Smith 1989
Sunflower (*Helianthus annuus*)	3500 BP	Higgs, TN	Smith 1989
Chenopodium (*Chenopodium berlandieri*)	3500 BP	Cloudsplitter, KY	Riley et al. 1990
Squash (*Cucurbita pepo ssp ovifera*)	2850 BP	Cloudsplitter, KY	Smith 1989

Other species important to native groups were species that were domesticated elsewhere—such as Mexico or Peru. These include bottle gourds (*Lagenaria siceraria*), pumpkins (*Cucurbita pepo ssp pepo*), maize (*Zea mays*), and beans (*Phaseolus vulgaris*).

In addition to effects of climate change and prehistoric modifications, a number of modifications dating to the historic period have affected the communities at JMF. Perhaps the most profound effects were due to logging activities. Effects include extensive sheet erosion in the uplands, excessive deposition in the valleys, and transformation of forest species from k-selected to r-selected species, the r-selected species being those that are intolerant of shade and can therefore colonize disturbed areas more quickly. Although not documented within the JMF, the Borden Formation at Bernheim was exploited for its siderite, an ore of iron. As a result of this industry, much charcoal is necessary and further deforestation would have occurred. Cultural resources remaining from this industry would have been the stone furnaces, which have not been identified at JMF. Other examples of historic modifications include agriculture, in which the diversity of species in the valleys would have been replaced by monocrop plots; species extermination due to hunting (e.g. the passenger pigeon); and the demise of native species due to competition with introduced species such as Japanese honeysuckle, tree-of-heaven, and burning bush. In addition, salt-making from 1787 to 1830 at Mann's Lick would have necessitated huge amounts of wood to fuel the 100 boiling kettles at the Brooks' furnaces.

Faunal Resources. The large biomass and high carrying capacity of the Falls of Ohio area was one of the significant factors that attracted man seasonally to his portion of the country from 10,000 B.C. to the present. The rich resource base would have been important in providing prehistoric subsistence and other needed materials. During glacial periods of Quaternary times, the mammoth and mastodon were residents of the region, which was treeless tundra. Other types of large and now-extinct animals such as the giant peccary, ground sloth, as well as the bison, horse, elk, deer and beaver would also have been available to the Paleoindians (Wayne and Zumberge 1965; Shelford 1963).

During most other periods, the white-tailed deer was a major source of food; this species favored the restricted valleys of the upland for yarding during winter (Shelford 1963). The local fauna today, as well as in the past, included such small mammals as the red fox, groundhog, cottontail rabbit, opossum, raccoon, squirrels, and others, as well as many species of birds, including turkey and waterfowl. The black bear, bobcat, elk, and other animal species, however, are no longer found in the area. Other fauna that are now gone from the area include the wolf, beaver, and passenger pigeon. The population of mink, fox, and most other animals has been reduced, due to the loss of habitat and hunting. Numerous species of freshwater mussels and other shellfish such as gastropods were present and used by the aboriginal inhabitants. Studies of various Indiana and Kentucky shell mounds have yielded remains suggesting that major fish populations used prehistorically were the drumfish (*Applodinotus gruniens*) and catfish (*Ictalurus sp.)* which fed upon the mussel populations.

In a limited faunal analysis done of the prehistoric KYANG Site (15JF267) in 1974, Fred Hill found that many species present historically were also exploited in the Wet Woods area during prehistoric times (Hill n.d.). These species embrace a range of mammals, turtles, birds, fish and mollusks. The mammalian species represented include white-tailed deer, dog or wolf, beaver, gray fox, raccoon, mink, bobcat, squirrel, groundhog, skunk, and muskrat. Five species of turtles were among the reptilian species utilized prehistorically, including box, soft shell, painted, stinkpot, and snapping turtles. The only bird remains identified in this limited analysis were those of the turkey. Fish remains include the species of freshwater drumfish and buffalo fish.

PREHISTORIC CONTEXT

Cultural change is a slow and continual process; therefore, archaeologists typically divide the long period of human history into regionally distinct cultural periods. As discussed below, archaeologists recognize four broadly defined prehistoric periods for the Eastern Woodlands. The sections below review the prehistoric cultural groups that may have been present in the JMF over the past 12,000 years. Each group occurred during specific periods of time and generally ranged across the Eastern North American woodlands. The temporal and regional variants within the Falls region, however, must still be discovered, analyzed and interpreted. Data recovered during the present project will aid these investigations. Overall, trends evident from the earliest (Paleoindian) to the latest (Mississippian) period include an increase in sedentism, increase in social complexity, and increase in dependence on agriculture. These trends have been explored by many in the social sciences such as Lewis Morgan, Leslie White, and Robert Wright (Wright 2000).

Paleoindian Period (10000 to 8000 B.C.)

Although the lithic material associated with Paleoindians is the earliest dated material recovered from humans in North America, it is also one of the most impressive. As with many cultural adaptations, the technology and the Paleoindians themselves had a long history of evolution in the Old World before migrating to the New World. Artifacts found in both Old World and New World assemblages include fluted points, polyhedral cores, prismatic blades, and the *piéces esquillèe*. Additional artifacts associated with Paleoindians include an extensive unifacial toolkit that included scrapers, gravers, and *limacés* (slug-shaped unifaces) (Dragoo 1973).

As the wealth of data from Paleoindian sites have accumulated, it has become apparent that groups prior to Clovis lived in North American. From Cactus Hill and Meadowcroft Rockshelter in the east to Pendejo Cave in the Southwest, dates prior to 10,000 B.C. have been documented. With regard to the Falls of the Ohio region, however, no conclusive evidence for pre-Clovis populations has been documented so researchers follow the Paleoindian subperiods defined by Tankersley (1996): Early Paleoindian, Middle Paleoindian, and Late Paleoindian. Evidence for pre-Clovis occupations may lie within the 20,000 year old Tazewell deposits along the Ohio River or along the Salt River drainage.

Early Paleoindian (9,500-9,000 B.C.). The Early Paleoindian period is represented by magnificent Clovis spear points, polyhedral cores, and prismatic blades. Subsistence included megafauna such as the mammoth within prairie habitats and mastodons within forested habitats. Although there is scant archaeological evidence of Paleoindian social complexity, following arguments by Wright (2000), subsistence strategies that included procuring quantities of meat larger than one or two families could use quickly suggest higher levels of group cohesion and social complexity. Within Jefferson County, mammoth and mastodon remains have been found in Wisconsinan gravel deposits at depths between three and eight meters (Granger and DiBlasi 1976:20). The earliest Paleoindian occupation may likely lie therein.

Middle Paleoindian (9,000-8,500 B.C.). The Middle Paleoindian period is represented in the Southeast by Cumberland, Beaver Lake, Quad, and Suwannee projectile point/knives (PPK). During this subperiod, local raw materials were chosen more often. Perhaps related to this expanded use of material type, reduction strategies included bipolar reduction. Artifact types associated with the Middle Paleoindian include *limacés*, and scrapers and gravers exhibiting a

spur or protrusion. Longworth-Gick (15JF243) is one site within Jefferson County that contained evidence of Middle Paleoindian occupation.

Late Paleoindian (8,500-8,000 B.C.). The Late Paleoindian Period is represented by side-notched points such as Dalton. It is during this subperiod that the greatest change in mobility and diet occurred. During this subperiod, diet appears to have become even more varied as the climate became more temperate. Although some rockshelter sites contain evidence of Early Paleoindian Clovis occupations, such as at Miles Rockshelter Site 15JF671 (Bader et al. n.d.) and Wolfe Shelter Site 15CU21 (Lane et al. 1995), the Dalton culture is often reported to be the first to routinely take advantage of rockshelters (Tankersley 1996; Walthall 1998).
Many items that were found in later prehistoric periods have not been recovered from Paleoindian contexts due to preservation. Cultural traits represented by that material culture were also assumed to be absent from the Paleoindian repertoire. Artifacts of botanical remains and bone or ivory ornamentation are some examples. Paleoindian material recovered from sites with better preservation such as rockshelters, bogs, and springs, however, changed the picture of Paleoindian cultural adaptations.

Subsistence strategies of the Paleoindian populations have also become more complex as more data have been analyzed. Although often portrayed as relying predominantly on megafauna such as the mastadonts (some evidence comes from Loy and Dixon 1998), data from sites with optimal preservation reveals a more complex story. From the earliest sites such as Cactus Hill, the exploitation of game such as rabbit, bear, deer, and elk was documented by blood residue analysis (NPS 2007a). Data from Meadowcroft Rockshelter suggest possible botanical resources used by Paleoindians included hickory, walnut, and hackberry (Carr, Adovasio, and Pedler 2001). As noted previously, as rockshelters were chosen as habitation sites more often during the Late Paleoindian time, data revealed a greater variety of patch resources were exploited than previously realized, particularly non-migratory forest-dwelling species such as squirrel and turkey or edge-dwelling deer (Walthall 1998).

As of the 1990 preservation plan, 24 Paleoindian sites had been documented for the Salt River Management Area. Site types include rockshelters such as Miles Rockshelter (15JF671), Howe Valley Rockshelter (15HD12), and 15ME32 as well as open habitation sites along the Ohio River such as Longworth-Gick (15JF243) (**Table 4**). Based on this data, Paleoindian sites may be encountered within Jefferson Memorial Forest in rockshelters or buried in floodplain deposits.

Table 4. Sites with Paleoindian Evidence within the Salt River Management Area

Site	Site Type	Watershed	Diagnostics	Reference
Longworth-Gick (15JF243)	open habitation	Ohio River	Cumberland PPK	Boisvert et al. 1979:282
15MD402	open habitation w/mound	Salt River	Clovis	Fort Knox ICRMP 2001
Howe Valley Rockshelter (15HD12)	rockshelter			Tankersley 1990
15Me32	rockshelter			Tankersley 1990
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek, tributary to Floyd's Fork	Clovis PPK	Bader et al. n.d.

Archaic Period (8000 to 900 B.C.)

Over the course of the Archaic period, populations developed new cultural traits and adaptations, including the use of pottery and use of seed and grain crops. A more sedentary lifestyle can be interpreted from the use of heavy stone bowls and storage pits during this period. Three subperiods have been defined for the Archaic Period: Early Archaic (8000 B.C. to 6000 B.C.), Middle Archaic (6000 B.C. to 3000 B.C.), and Late Archaic (3000 B.C. to 900 B.C.).

Early Archaic (8000 to 6000 B.C.). A number of new styles of projectile points suggests regional cultural growth during the Early Archaic. Diagnostic projectile point types include Kirk Corner-notched, Charleston Corner-notched, and LeCroy Bifurcate. Beveling along blade edges, grinding along basal edges, and serrations along margins are common. Material types might include high-quality Galconda/Harrison County chert for Charleston Corner-notched projectile point/knives (Bader et al. n.d.) or Muldraugh/Knobs chert for the Kirk Corner-notched projectile point/knives (Fort Knox ICRMP 2001).

Hunting gear included the atlatl. Although the portions made of antler and wood deteriorate too rapidly to recover from most archaeological deposits, the lithic bannerstones do not. Having had much labor and energy put into their manufacture, these items also were often items of trade or tribute. In addition, from sites such as Windover, Florida where preservation was exceptional, the Early Archaic assemblages had also included bone projectile points, the antler atlatl hooks, and wooden canoes (NPS 2007b). The Early Archaic component at the Ashworth Rockshelter (15BU236) in Bullitt County yielded bone needles as well as an antler pressure flaker (Jeffries 1990).

A number of sites in the region provide comparative data for Early Archaic movements within Jefferson Memorial Forest (**Table 5**). According to Fenton and Huser (1994), Early Archaic sites in southwestern Jefferson County are most likely deeply buried along Ohio River terraces between 440 and 445 ft amsl. Although an Early Archaic horizon might be found within large floodplains of Jefferson Memorial Forest such as along Knob Creek or Brier Creek, the highest probability would be within any intact deposits within rockshelters, such as were encountered

along Floyd's Fork and its tributaries. Human remains may be encountered within these deposits.

Table 5. Sites with Early Archaic Components near the JMF

Site	Site Type	Watershed	Diagnostics	Reference
Ashworth Rockshelter (15BU236)	rockshelter	Floyd's Fork	Ashworth CN	DiBlasi 1981
McNeeley Lake (15JF200)	rockshelter	Pennsylvania Run, tributary of Floyd's Fork	Charleston CN Kirk	Granger 1985
Durrett Cave (15JF201)	rockshelter-cave	Pennsylvania Run, tributary of Floyd's Fork	Charleston CN Kirk	Granger 1985
Cooper Cave (15JF537)	rockshelter-cave	Pennsylvania Run, tributary of Floyd's Fork	Charleston CN Kirk CN	Bader et al. n.d.
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek, tributary of Floyd's Fork	MacCorkle Thebes	Bader et al. n.d.
Longworth-Gick (15JF243)	open habitation	Ohio River	Kirk LeCroy Kanawha	Boisvert et al. 1979:282 Collins and Driskell 1979

CN=Corner-notched

Middle Archaic (6000 to 3000 B.C.). During the Middle Archaic period, the climate became warmer and drier than today. Known as the Hypsithermal, this climate change led to vast changes in ecological conditions. Species that may have held on since glaciation or that had expanded into riskier microhabitats would have died out. Prairie ecosystems would have expanded eastward into a larger portion of Kentucky. Just as there are relic communities left from glaciation, there are probably relic communities left from the expansion of prairie habitats during the Hypsithermal.

Due to this environmental change, the natural resources available to the Middle Archaic people changed, leading to a marked change in residency and subsistence from the Early Archaic. This period of restricted natural resources gave rise to more permanent settlements, one indication of which is the presence of storage pits. Parry and Kelly (1987, in Andrefsky 2005) propose other clues in the lithic assemblage that indicate increased sedentism: less reliance on formal tools, and greater use of retouch and expedient-use tools. Middle Archaic lithic assemblages fit this model.

Subsistence patterns also changed during this period of climate change. Across the Eastern North American Woodlands, Middle Archaic populations can be identified by their extensive exploitation of shellfish. Shell mounds and shell-laden horizons, in addition to the appearance of netsinkers and fishhooks in the Middle Archaic toolkit, document this change to riverine resources. In addition, mortars and pestles document the processing of mast resources such as walnuts and hickory.

Diagnostic projectile point types of the Middle Archaic period include Kirk Stemmed, White Springs, Stanly, and Morrow Mountain. Additional items in a Middle Archaic assemblage might

include woven fabrics, atlatls, bone and antler tools, awls, red ocher, marine shell, and copper. Burials of canine companions have been documented (Lewis and Kneberg 1958).

At Jefferson Memorial Forest, Middle Archaic populations might have encountered expanded xeric forests and barrens in place of some of the mesophytic or sub-xeric forests. Rockshelters and lowlands near streams are expected Middle Archaic site locations within Jefferson Memorial Forest. According to Fenton and Huser (1994), Middle Archaic sites also occur in surficial deposits along ridgetops. Based on evidence from tributaries of Floyd's Fork, a clustering of occupations within the same drainage is also expected. Sites containing a Middle Archaic component near JMF are listed in **Table 6**.

Table 6. Sites with Middle Archaic Components in Southwestern Jefferson County, Kentucky

Site	Site Type	Watershed	Diagnostics	Reference
15JF143	open habitation		Big Sandy PPK	Granger and DiBlasi 1975
15JF214	open habitation		Big Sandy PPK	Granger and DiBlasi 1975
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek	Matanzas PPK Big Sandy II PPK; engraved bone pin	Bader et al. n.d.
McNeeley Lake (15JF200)	rockshelter	Pennsylvania Run	Big Sandy, Merom, Brewerton, and Salt River SN PPKs	Granger 1985
Durrett Cave (15JF201)	rockshelter	Pennsylvania Run	Salt River SN, and Big Sandy PPKs	Granger 1985
KYANG (15JF267)	open habitation	Pond Creek	Big Sandy and Salt River SN PPKs; engraved bone pins	Bader and Granger 1989
Rosenberger (15JF18)	open habitation	Ohio River		Jefferies 1990
Villiers (15JF110)	open habitation	Ohio River		Jefferies 1990
Spadie (15JF14)	open habitation	Ohio River		Jefferies 1990

Late Archaic (3000 to 900 B.C.). During this period, populations increased, maintained even more permanent settlements, and developed new technologies. In the Southeastern United States, the first evidence of pottery, a fiber-tempered ware, can be attributed to Late Archaic groups. In the Falls of the Ohio region, diagnostic projectile point/knives include McWhinney, Karnak, Merom, Bottleneck, and Ledbetter. Raw materials used for these are usually poor-quality, local materials. A variety of groundstone tools have been recovered, including three-quarter grooved axes. Bone and antler tools are well represented from Late Archaic sites, and include atlatl hooks, fishhooks, awls, pins, and antler projectile points. The

extensive trade/tribute networks that were maintained as evidenced by the recovery of steatite, copper, and marine shell at Late Archaic sites suggest stronger leadership. Social stratification is also suggested by more extensive mortuary practices, such as found at the KYANG Site (15JF267).

Subsistence during the Late Archaic included oily and starchy seed crops such as lambsquarters (*Chenopodium berlandieri* Moq. ssp. *jonesianum*), sunflower (*Helianthus annuus* var. *macrocarpus*), and ragweed (*Ambrosia trifida*) (Crites 1993; Gremillion 1995; Riley et al. 1990). Squash (*Cucurbita pepo* ssp *ovifera*) also became domesticated. Although the earliest evidence for the domestication of these plants comes from other areas, the rockshelters of JMF may provide the right preservation environment for new data. Within Jefferson County, archaeological evidence for the diet of Late Archaic peoples has come from sites such as Lone Hill (15JF562/15JF10), Arrowhead Farm (15JF237), and Old Clarksville (12CL1). Floral resources included mast resources such as black walnut, butternut, and hickory. Freshwater resources included *Rangia sp*, an introduced snail species from the lower Mississippi Valley, drumfish (*Applodinotus grunniens*), and catfish (*Ictalarus sp.*) (Janzen 1971).

Late Archaic sites include a diverse range of types, including shallow, upland, lithic scatters; hillside rockshelter/cave sites; and deep middens along the major rivers (**Table 7**). Janzen (1977) proposed a settlement pattern of seasonal migrations between ecosystems. Granger (1988) follows this out and proposes that groups timed their migrations to be near the Ohio River for spring fish runs, used sites such as Lone Hill, KYANG, and Minor's Lane during the summer and fall, and, in southwestern Jefferson County, made forays into the Knobs to acquire fresh supplies of Muldraugh/Knobs chert. Janzen (1977) also proposes that Late Archaic subsistence strategies were scheduled in such a way as to enable the exploitation of several environments, which thereby reduced the need for seasonal movement and led to increased sedentism. In addition to the storage pits typical of the Middle Archaic period, Late Archaic sites included features such as rock hearths and dark middens--further evidence of the decline in mobility.

Within JMF, sites containing a Late Archaic occupation are expected within buried deposits on terraces or floodplains along Brier Creek and Knob Creek. Rockshelters may also have Late Archaic occupations. Although not expected on eroded ridgetops, an ephemeral lithic scatter is possible.

Table 7. Selected Sites with Late Archaic Components in Jefferson County, Kentucky

Site	Site Type	Watershed	Diagnostics	Reference
15MD402	open habitation w/mound		McWhinney Merom-Trimble	Fort Knox ICRMP 2001
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek	McWhinney Turkey-tail	Bader et al. n.d.
McNeeley Lake (15JF200)	rockshelter	Pennsylvania Run	McWhinney (Rowlett, KYANG Stemmed) (n=26)	Granger 1985
Durrett Cave (15JF201)	rockshelter	Pennsylvania Run	McWhinney (Rowlett)	Granger 1985
Minor's Lane	open habitation	Pond Creek		Granger 1988:168; Janzen 2008
KYANG (15JF267)	open habitation	Pond Creek	McWhinney and Benton Cluster PPKs	Bader and Granger 1989; Granger 1988:168
Lone Hill (15JF562/15JF10)	open habitation	Pond Creek	McWhinney and Benton Cluster PPKs	Bader 2007; Janzen 1977, 2008
15JF674	open habitation	Pond Creek		Kreinbrink 2005
Arrowhead Farm (15JF237)	open habitation	Ohio River		Mocas 1976
Rosenberger (15JF18)	open habitation	Ohio River	McWhinney, Merom-Trimble, and Brewerton-like	Collins et al.1979; Jefferies 1990
Villiers (15JF110)	open habitation	Ohio River	Merom-Trimble	Collins et al.1979; Jefferies 1990
Spadie (15JF14)	open habitation	Ohio River	Lamoka Brewerton-like	Collins et al.1979; Jefferies 1990
Hornung (15JF60)	open habitation	Ohio River		Janzen 1977, 2008; Jefferies 1990

Woodland Period (900 B.C. to A.D. 900)

Trends established in the Late Archaic, such as increased social complexity and inequality, coupled with sophisticated mortuary practices, continued during the Woodland and culminated in the Adena and Hopewell cultural traditions. In some ways, the Woodland lifestyle was a continuation of earlier Later Archaic and some cultural traditions spanned the Late Archaic and Early Woodland periods. Technological innovations serve to differentiate the Woodland from the Archaic as a developmental stage. Among these is the manufacture and use of ceramics. The

ungrooved celt replaced the Archaic grooved axe, and bone beamers took the place of endscrapers (Railey 1990:248, 1996).

The period is also noted by the appearance of social or ritual spaces aside from the domestic dwellings, including earthen enclosures and burial mounds. Upstream from the Falls of the Ohio, a complex social system labeled Adena appeared in the late Early Woodland around 500 B.C. and continued into the early Middle Woodland when it intensified into the Hopewell Tradition. The Woodland period is divided into Early (1,000 - 200 B.C.), Middle (200 B.C. - A.D. 500), and Late (A.D. 500 - 1000).

Early Woodland (1000 B.C. to 200 B.C.). Differences between Woodland sub-periods are largely distinguished by changes in ceramic styles. Early Woodland pottery is generally thick and grit-tempered; vessel exteriors exhibit cordmarking fabric impressions, or are plain. In the Falls of the Ohio region, the grit-tempered cordmarked Fayette Thick is representative of Early Woodland ceramic assemblages (Mocas 1995). Early Woodland projectile points include a variety of stemmed and notched types, including Kramer, Wade, Adena, Gary, and Turkey-tail, as well as Cogswell Stemmed (Justice 1987). Early Woodland sites in the Outer Bluegrass regions are found primarily along the region's rolling ridgetops particularly near springs and other critical resources (Railey 1996:85). Domestic structures varied in shape between oval, circular, square, and rectangular. To the east in the mountain regions of the state, these groups extensively exploited rockshelters and occupied many for long periods of time.

Although the emphasis of subsistence practices during this period remained on hunting and gathering, the continued development of the horticulture of weedy annuals marks a divergence from the earlier period (Railey 1990:250). Plant species in the Eastern Agricultural Complex (EAC) tended for their seeds included goosefoot (*Chenopodium berlandieri* var. *jonesianum*), erect knotweed (*Polygonum erectum*), little barley (*Hordeum pusillum*), maygrass (*Phalaris caroliniana*), sumpweed (*Iva annua* var. *macrocarpa*), and sunflower (*Helianthus annuus*). Species propagated for their fruit include cucurbit (*Cucurbita sp.*). In addition, maize has been reported from a few Early Woodland sites in Ohio and West Virginia (Wymer 1992) as well as Kentucky at the Hornung Site (15JF60).

The regional phase identified for the Early Woodland period is the Riverwood Phase (ca. 1200 to 300 B.C.) (Applegate 2008). Sites near JMF containing an Early Woodland component are summarized in **Table 8**.

Table 8. Sites with Early Woodland Components near the JMF

Site	Site Type	Watershed	Diagnostics	Reference
Riverwood/KOA (15BU33)	rockshelter	Salt River	thick, grit-tempered sherds	Janzen 1977; Bader 2007
Hornung (15JF60)	open habitation	Salt River/Ohio River	Salt River plain (grit-tempered, thick, undecorated)	Janzen 1977
15JF214	open habitation	Pond Creek	Adena and Motley PPK's	Granger and DiBlasi 1975
15JF311 15JF316 15JF322 15JF325	open habitation	Ohio River	Adena or Motley PPK's	Granger, DiBlasi, and Braunbeck 1976
Arrowhead Farm (15JF237)	open habitation	Ohio River	Zorn Punctate	Applegate 2008; Mocas 1976
Rosenberger (15JF18)	open habitation	Ohio River	Adena or Cogswell-like PPK's; thick grit-tempered ceramics	Applegate 2008; Collins et al.1979
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek	contracting stemmed	Bader et al. n.d.

Middle Woodland (B.C. 200 to 500). The Middle Woodland period is largely marked by changes in ceramic style. While Early Woodland pottery was thick and crude, some Middle Woodland ceramics were designed for ritual or ceremonial use and exhibited thin walls and elaborate decorations (Muller 1986:84-85). Middle Woodland ceramics include conoidal and barrel-shaped jars with flat, rounded, or pointed bottoms, with plain, cordmarked, dowel-impressed, or fabric-impressed surfaces. In the Falls of the Ohio region, the grit-tempered, cordmarked Fayette Thick ceramics became less numerous and limestone-tempered Falls Plain become more prevalent (Mocas 1995). Decoration in the form of nodes, zoned incised punctuation, or incised dentate stamping have been recovered from sites of this period (Railey 1990:251, 1996:89). Projectile points typical of the period include expanded-stem points and shallow-notched points, including Snyders, Steuben, Lowe Flared Base, Chesser, and Bakers Creek (Railey 1990:252). Middle Woodland peoples continued to rely on hunting, gathering, and an intensified form of horticulture that emphasized the native plant species of the EAC. Wymer (1992) found that the Middle Woodland populations relied more on these seed crops than later groups. In addition, maize has been recovered and dated from the Harness Mound in Ohio (Wymer 1992). These additions to the diet may have had repercussion throughout the social, political, and economic spheres, changes that are discussed below.

Settlement patterns appear to change through time, with small, scattered settlements occurring early in the period and an increase in nucleation associated with larger base camps occurring later in the period. Ritual spaces, including Adena tradition burial mounds and later Hopewell tradition earthen enclosures are associated with Middle Woodland sites (Railey 1990:251-252, 1996). Large-scale mound construction is indicative of significant community effort and politically complex, ranked societies. Social stratification also is evident by the burials, which were becoming increasingly more elaborate. Although Clay (1992) had argued Adena political systems were not controlled by chiefs or "Big Men", Wright's (2000) interpretation of the role of Big Men to solidify intra-group identity and inter-group détente appears to apply to the Adena. The logic of non-zero sum games found in Wright (2000) are actually foreshadowed by Clay's conclusions of Adena manifestations in the Ohio Valley:

> *. . . it is suggested that cooperative mortuary ritual in Adena, most importantly the construction of burial mounds, reflects just this tendency for dispersed social groups in the time period ca. 400 B.C.-1 A.D. to buffer local shortages in goods within a larger social environment becoming more densely populated and competitive. Through alliances with other groups, patterns of potential economic reciprocity were established and access to dispersed environmental resources…was assured, cemented…. Finally, the grave goods represent items of exchange, payoffs preserving symmetry in reciprocity between exchanging groups.* (Clay 1992:80.

These alliances are visible in the archaeological record by the exotic materials found on Adena and Hopewell sites. Characteristic artifacts include the following: gorgets, incised stone and clay tablets; platform pipes; barite and galena bars; copper earspools, bracelets, and beads; and bone and shell beads (Webb and Snow 1974).

The temporal division between Adena and Hopewell earthworks is not as well defined in the Bluegrass as it is further north along the Ohio River. Researchers are increasingly treating Adena and Hopewell sites in Kentucky as a single ceremonial tradition (Railey 1996:97-101) or as an organization type (Clay 1991). Within the Falls of the Ohio region, the Middle Woodland Adena/Hopewell manifestation is identified as the Zorn Phase. Sites containing Middle Woodland components are summarized in **Table 9.**

Table 9. Sites with Middle Woodland Components in Jefferson County, Kentucky

Site	Site Type	Watershed	Diagnostics	Reference
Arrowhead Farm (15JF237)	open habitation	Ohio River	Crab Orchard ceramics	Mocas 1976
Hunting Creek (15JF268)	open habitation	Harrods Creek	prismatic flake blades, dentate stamped sherd, Falls Plain ceramics, and Snyders PPK's	Bader 2007 Mocas 1992
Zorn Avenue (15JF250)	open habitation	Ohio River	"Hopewellian elements" Falls Plain ceramics Snyders PPK's	Bader 2007 Mocas 1992 Janzen 2008

Late Woodland (AD 500 to 900). The transition between the Middle and Late Woodland periods is poorly understood. The Late Woodland period is generally perceived to be a period of decline in the importance of the ritual that characterized the Middle Woodland period. Earthwork construction stopped and long-distance exchange collapsed dramatically (Railey 1996:110). Late Woodland societies apparently developed along different lines regionally, but all seem to have depended initially upon the exploitation of local wild resources and the domesticated plants of earlier times. The cultivation of maize characterized the latter portion of the period. Unlike the nucleated villages of the Newtown Phase in Ohio (Railey 1991), Late Woodland societies in the Falls of the Ohio area were small and dispersed and located in a variety of environmental settings. Sites containing a Late Woodland component in Jefferson County, Kentucky are summarized in **Table 10**.

Table 10. Selected Sites with Late Woodland Components in Jefferson County, Kentucky

Site	Site Type	Watershed	Diagnostics	Reference
Arrowhead Farm (15JF237)	open habitation	Ohio River	shell-tempered ceramics triangular ppks	Mocas 1976; Bader 2007
Hunting Creek (15JF268)	open habitation	Harrods Creek	Rowe/Bakers Creek shell-tempered ceramics	Bader 2007
McNeeley Lake Site (15JF200)	rockshelter	Pennsylvania Run	shell-tempered ceramics triangular ppks	Bader 2007
SARA Site (15JF187)	open habitation	Ohio River		Mocas 1995
Muddy Fork Site	Open habitation	Beargrass Creek	Lowe Flared Base; Madison Triangular; sandstone/quartz tempered cordmarked ceramics	Janzen 2004, 2008
Miles Rockshelter (15JF671)	rockshelter	Cedar Creek	shell-tempered ceramics triangular ppks	Bader et al. n.d.
Custer Site (15JF732)	open habitation	Ohio River	Limestone-siltstone tempered cordmarked ceramics; Lowe Flared Base ppks	Murphy and Bader n.d.

Late Woodland artifact assemblages do not differ significantly from those of the Middle Woodland, with the exception that there is a lack of ceramics decorated with Hopewellian motifs and other ceremonial or exotic objects (Railey 1990:256). Late Woodland ceramics are generally cordmarked jars with little decoration.

Projectile points initially consisted of expanded-stemmed points such as Lowe Flared Base. With the technological development of the bow and arrow, however, small triangular arrow points appeared. Odell (1988) proposes that experimentation with the new technology began much earlier—around A.D. 1—and that many of the first arrows were flakes. Seeman, on the

other hand, suggests the first culture to use the bow and arrow was the Jack's Reef Horizon around A.D. 700. Whether this is reflected in data from the Falls of the Ohio remains to be seen.

Subsistence continued to rely predominantly on hunting and generalized gathering, but the plants comprising the EAC continued to be important. It is during this period that maize becomes more important in the diet, as does cucurbits (squash) over most of the seed crops of the EAC. Only goosefoot and sunflower continued to be propagated (Wymer 1992). In place of the starchy seeds, Late Woodland populations included "sumac, elderberry, raspberry, honey locust, and others" in their diet (Wymer 1992:66).

Mississippian (A.D. 900-1838)

As population densities across North America reached threshold levels and inter- and intra-village social structures became more complex, a chiefdom-level social system developed. This social system developed as one village (and one person/group within that village) became more economically and politically influential among surrounding villages. The Mississippian chiefdom system coalesced at the confluence of the Ohio and Mississippi rivers. Its influence encompassed vast portions of North America, including the Falls of the Ohio. Significant research questions that may be addressed by new data from the Jefferson Memorial Forest include the relationship between Mississippian groups living within the Falls of the Ohio area and those at the Mississippian heartland near present day St. Louis. In addition, the relationship between the local Mississippian groups and the Fort Ancient groups upstream near present day Cincinnati is another important avenue of research. Perhaps the Falls of the Ohio served as a buffer zone between the two contemporary groups; perhaps the area saw much conflict between the two.

The Mississippian period has been divided into two sub-periods: Early Mississippian (A.D. 900-1300) and Late Mississippian (1300-1700). The following summarizes data from Lewis (1996). Artifacts diagnostic of the Mississippian culture include new lithic tools such as notched hoes that exhibit bright polishes from their use in maize agriculture and shell-tempered ceramics that were made into new forms like jars, saltpans, and hooded bottles. Ceramic decorations characteristic of this period included incising (later) and red filming (earlier).

Settlement patterns typical of the Mississippian culture consist of fortified villages with secondary hamlets in the outlying areas (Kreisa 1995). Within the primary village, a platform mound and plaza area became the center of religious and political influence. Structures within villages reflected social inequality as well as craft specialization. Mississippian houses can be identified by their rectangular rather than round footprint, trench manufacturing technique, and wattle-and-daub debris.

Subsistence practices are one of the most recognized changes occurring during this time period. It is not until the Mississippian and Fort Ancient cultures come to rely upon maize as a major staple that subsistence practices change from hunting, gathering, and horticulture to agriculture. As mentioned previously, however, maize had been brought into the upper Ohio Valley earlier. In addition, as Yerkes (1987) emphasizes, subsistence practices from previous periods continued and some technologies from the previous periods were adapted to the new practice. Plant knives used with EAC domesticates help make the leap to an agricultural-based society smoother.

The sudden collapse of Mississippian culture is attributed to the introduction of European diseases by the 1500's, with much of the demise occurring between A.D. 1500 and 1700 (Lewis 1996). Data from the Falls of the Ohio region may provide information on whether this demise happened here concurrently with villages to the west.

As at Otter Creek (Hale 1981), Mississippian houses could be encountered in floodplain settings at Jefferson Memorial Forest. **Table 11** summarizes sites with Mississippian components in Jefferson County, Kentucky.

Table 11. Sites with Mississippian Components in Jefferson County, Kentucky

Site	Site Type	Diagnostics	Reference
15JF143 15JF214	open habitation	projectile points	Granger and DiBlasi 1975
15JF306 15JF323 15JF327 15JF331	open habitation	projectile points	Granger, DiBlasi, and Braunbeck 1976
Green Street (15JF95)	mound	mound	Young 1910, in Bader 2007
Prather Site (12CL4)	mound	platform mound	Munson and McCullough 2006
Shippingport Island	open habitation	ceramics	French and Bader 2004; French et al. 2006

HISTORIC CONTEXT

The land that became Kentucky was inhabited by a number of historic Native American tribes, including the Chickasaw in the western portion, Shawnee through the central portion, and Cherokee through the Cumberland River valley, but primarily in the eastern portion of the state. The Shawnee, for example, had had a substantial village at the mouth of the Cumberland River around Smithland. From about 1710, this western Shawnee group was pushed out by allied Cherokee and Chickasaw. The resulting migration led across the state to West Virginia, with many semi-permanent settlements throughout the central portion of the state. Throughout the 1730s and 1740s, however, these groups continued to migrate northward to the Scioto River valley in Ohio (Mahr 1960).

Native American presence during the post-1750 period most often consisted of scouting parties, hunting parties, and raids. Historic native groups undoubtedly continued to exploit resources such as the salt licks and chert deposits as well as the abundant wildlife. The ever-increasing flow of non-natives into the region was an intrusion that proved impossible to stem. Raiding during the period from the 1780's to 1790's was especially active, particularly for the area surrounding JMF; these included skirmishes around the Brooks homestead and other portions

of the Wilderness Road. During the Revolutionary War, British agents encouraged the harassment of settlements in Kentucky. One appalling example is the 1781 Long Run Massacre in eastern Jefferson County, which had been instigated by British trader Alexander McKee and Mohawk Joseph Brant. Many natives in this 200-person force were Huron, a tribe also from the northeastern U.S (Kentucky Genealogy 2008; Painted Stone Settlers, Inc. 2008).

After the close of the Revolutionary War, however, participants and the motives behind skirmishes changed. Many of the raiding parties that scoured Kentucky after the war consisted of Shawnee and other Ohio tribes in retaliation for deeds committed by George Rogers Clark's campaigns into the Ohio country, including the 1782 destruction of villages at Chillicothe and Piqua Town. Other atrocities such as the Gnadenhutten Massacre of converted Moravian Delaware Indians by other parties in 1782 likewise led to increased friction throughout Kentucky, including Jefferson County.

Shawnee claims to the territory that became Kentucky were ceded to the Virginia colony after Lord Dunmore's War and formalized in the Treaty of Fort Stanwix in 1768 (Ohio History Central 2008). Cherokee claims to Central and Eastern Kentucky were ceded to the North Carolina colony in 1775 with the Treaty of Sycamore Shoals (Tennessee Encyclopedia of History and Culture 2008). Today, although no federally recognized tribe is identified within Kentucky, consultation with or notification to interested parties is necessary during many governmental procedures, particularly with reference to the National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA) (King 2008).

Euro-American historic exploration of the area began during the 1770s. The Falls of the Ohio area, at present day Louisville, was surveyed in 1773 by Thomas Bullitt. The area was re-examined the following year by John Floyd. As early as 1774, the Wet Woods area along Pond Creek (just north of the area that would become the JMF) was explored and mapped. This occurred largely due to its location along the Wilderness Road, one of the major thoroughfares of westward expansion. A section of the Wilderness Road known as Powell's Trace ran from Harrodsburg across Cox's Creek, crossing the Salt River near Shepherdsville. Around 1775, Thomas Denton led a surveying party into the Salt River country. By the time the American Revolution erupted, pioneer leaders including Bullitt, James Harrod, Daniel Boone, and Michael Stoner were establishing small settlements in the interior of Kentucky (Kramer 2001).

Land grants spurred settlement. An early documented settlement occurred in July 1776 when Samuel Pearman of the Virginia-based Shane, Sweeney, and Company travelled to the mouth of Salt River. The party claimed several thousand acres along the Ohio and Salt rivers (Kramer 2001). General George Rogers Clark landed at Corn Island at the Falls of the Ohio in 1778 with a regiment of troops and several families. Shortly afterwards, Clark and his regiment left behind the families on Corn Island as they began their campaign in the Illinois country and eventually captured the British forts of Kaskaskia, Cahokia, and Vincennes. A year later, the settlers on Corn Island moved to the Kentucky mainland and established the town of Louisville (Kramer 1980:41-51). Exploration and settlement activity in the Salt River valley accelerated substantially after Clark's expedition, often in the face of native opposition. Squire Boone, Daniel Boone's brother, explored the vicinity on several occasions during the late 1770s. The following year, Henry Crist began salt making operations at Bullitt's Lick, located at the junction of Salt River and the Rolling Fork River in present Bullitt County. Discovered in 1773 by Captain Thomas Bullitt while engaged in his surveying expedition at the Falls of the Ohio, it was for a time the only place in Kentucky where pioneers could find salt.

Kentucky remained part of Virginia until 1792 at which time it was incorporated. The JMF lies within Jefferson and Bullitt counties. Jefferson is one of three original counties of Kentucky. Named for Thomas Jefferson, it created in 1780 by the Virginia General Assembly. The population of the county concentrated around the Falls of the Ohio River and extended into tributary streams, notably Beargrass Creek. Bullitt County was established from portions of Jefferson and Nelson Counties. Formed in 1796, it was named for Kentucky's first lieutenant governor, Alexander Scott Bullitt. Shepherdsville was designated the county seat at a location where the famed Wilderness Road crossed the Salt River. It was founded by Adam Shepherd who owned the land on which the town was established.

Rivers and streams provided the easiest and earliest routes of transportation for early travelers. These, along with buffalo traces and Native American trails served as the primary arteries of travel. At those places where streams and roads intersected, villages became established. This occurred not only because of the intersection of various routes but because it was in these locations that goods and passengers were loaded and unloaded as they changed the mode of conveyance (Kramer 2001:59). Early landowners were typically not resident, in part due to the unsuitability of the area for residence, both in terms of the low flat wetter ground of the Wet Woods as well as the steep, remote portions of the Knobs.

Various industries were established within and surrounding the forest. Outside the present forest boundaries, salt licks such as Mann's Lick played an important economic role in the area until about 1830; later, brick kilns functioned south of Coral Ridge. Charcoal was produced in the Wet Woods area. Iron furnaces have been identified at Bernheim and in nearby areas. Within the forest boundaries, industries included tanneries, charcoal making, trapping, logging, and sawmills. The products of these industries may have been shipped north to Louisville over roads such as National Turnpike, but many were taken south to the Salt River, particularly to ferries. Goods traveled downriver to the Ohio River, then north to Portland (Rootsweb 2008a). Taverns sprang up to serve the workers of the area.

According to Kleber (1992), African American populations entered Kentucky during the years of early exploration as slaves. By the time of the first census, 1790, the population of African Americans in Jefferson County included 903 slaves and 5 freemen (Hudson 1999). Almost from the beginning, the African American population was higher in the Louisville area than in the rest of the state, although the average slave-holding family in the Louisville area owned just 4.3 slaves—a much lower number than the averages for North Carolina (6.7), Maryland (7.5), and South Carolina (12.1). In the Louisville area, the main industries using slave labor included hemp plantations such as Farmington and saltworks such as Mann's Lick. The largest percentage of African American population prior to the Civil War was in 1820, when the 4,824 slaves and 29 freemen comprised 38.1 percent of the Jefferson County population.

The following discussion focuses on key elements that were critical to the cultural development of the Fairdale and JMF area. It addresses the communities that were established in the area, and the families that lived within them.

Mann's Lick

Today, salt's significance as a necessary staple before the age of refrigeration cannot be appreciated. Food storage techniques are taken for granted, but in frontier times and before, salt was critical for meat preservation. Other industries such as tanneries also used salt in their operation. The need for salt was especially important during the time of the Westward

expansion for several reasons. The east coast was becoming densely populated and designated salt deposits were either exhausted or simply could not provide enough supply for the demand. Before the Proclamation of 1763, America was already importing tons of English salt and paying exorbitant prices. Before the time of the American Revolution (1780-1785), there were boycotts and embargoes which ceased imports of many English trade goods, including salt (Bemis 1935). America was desperate for a steady supply of the valuable commodity.

In the early days of Kentucky's exploration, the Longhunters followed big game or their trails to salty springs. They knew animals, such as deer, elk, and buffalo, required salt and would travel great distances to find it. Wide traces, pounded deep into the ground by great hooves over eons of time, led right to the springs (Hulbert 1904). Near salt springs, animals would eagerly lap from salt water pools, concentrated through partial evaporation, or vigorously lick the ground where salt crystals had solidified. The frontiersmen named these salt "licks" as any other geographical area worthy of remembering---sometimes named after a distinguishing geophysical landmark; sometimes after the person who discovered it. The famous Blue Licks of Kentucky was named for the blue clay layer associated with boggy ground near the springs (Mitchell 2006). Bullitt's Lick was named after the famous Colonel Thomas Bullitt, who exploited those salt springs near the Bullitt-Jefferson County line.

There are two credible explanations of how Mann's Lick, the early salt-making operations area between Okolona and Fairdale, received its name. One is a traditional story, told to historians in the 1920s by old timers in the area, about a settler named Mann who came to Corn Island with George Rogers Clark in 1778. Wheeler (2007) calls this individual Mr. Mooney-Money-Mann, combining possible monikers. Mann supposedly settled near Kenwood Hill and made salt for the settlement (Threlkel 1927). Although there is no direct evidence of anyone named Mann in the Corn Island settlement, the story might have some merit. There is no question that the Corn Island settlement would have required salt to survive. The closest salt resource would have been at Mann's Lick---the next closest resource at Bullitt's Lick would have meant traveling another seven miles farther south through an area beset with danger. Joseph Brooks, a well-known salt maker and one of the owners of the most active salt-making lands in what is now the Okolona-Fairdale-Hillview area, produced salt from land that bordered Kenwood Hill on the southeast. In the early 1900s, salt wells and crystallized salt on the ground could still be seen in that area (Speed 1929) (**Figure 9**). The other story is that Mann's Lick was named after John Mann, one of the men with Colonel (then Captain) Thomas Bullitt's 1773 surveying party (Hammon and Taylor 2002:xviii; Kleber 2001:279,587).

Figure 9. View of Mann's Lick (Jefferson County Office of Historic Preservation and Archives 1985).

There has been much confusion over exactly where Mann's Lick was located in southern Jefferson County. The problem arises because it is *impossible* to pinpoint an exact Mann's Lick location. Mann's Lick, as a salt producing area, covered a large area roughly bounded as follows: on the north by the northern-most extent of the Northern Ditch then south to South Park Road (about the juncture of Mann's Lick Creek with Wilson and Little Bee Creeks); on the east from approximately the Louisville & Nashville Railroad west to the Iroquois Hills (*Courier-Journal* 1989:40-41) (**Figure 10**). The highest quality salt of the entire area (possibly of the whole eastern U.S.), including that produced from Bullitt's Lick, was pumped from wells around the area known as Big Island (**Figure 11**). The mouth of Mann's Lick Creek was at the southwestern side of Oldham's Pond, which surrounded Big Island. Salt wells and associated saltworks were located all over this described area and all along Mann's Lick Creek (**Figure 12**).

Another source of confusion over Mann's Lick location was due to the estate name of Colonel John Todd's grant. Todd was killed in the 1782 Battle of the Blue Licks and the property was patented by his daughter, Mary Todd (Military Warrant 92, issued October 15, 1779). The property ran along nearly the entire length of Mann's Lick Creek on the east, and to double confusion, Mary named the estate there "Mann's Lick." When reading early documents mentioning "Mann's Lick," the reader has to decipher whether the term meant the area in general, the creek itself, or specifically the Todd property.

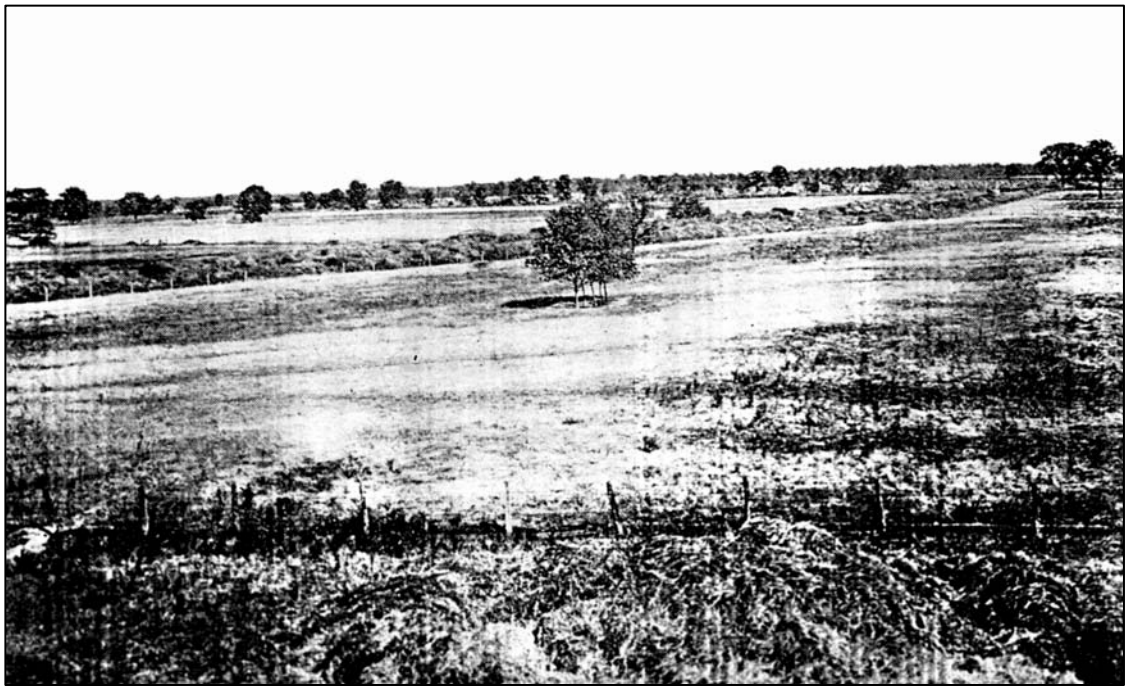


Figure 10. 1922 Photo of Mann's Lick Area.

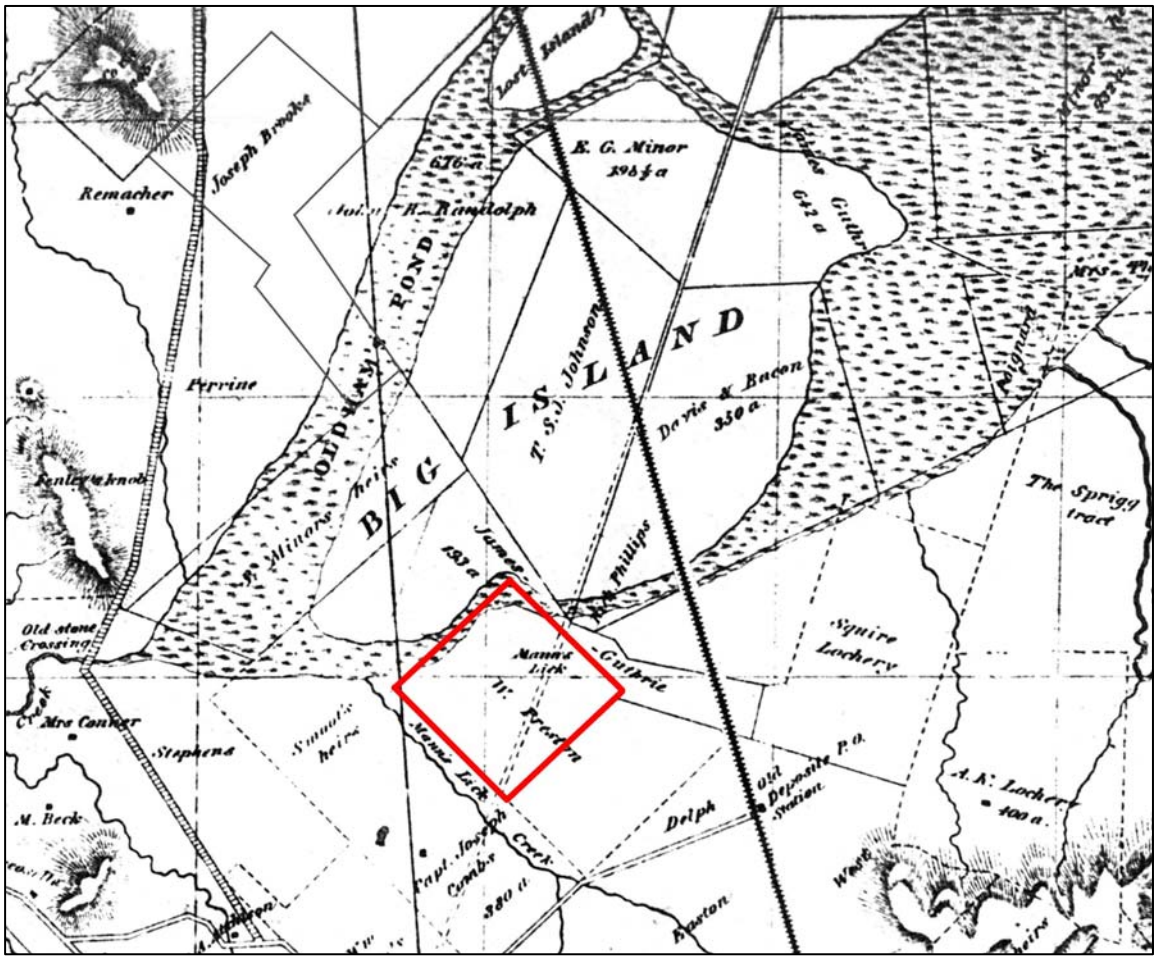


Figure 11. Location of Mann's Lick Farm.

Even though the Kentucky salt-making era ended about 1830 (tremendous salt deposits were discovered in Canada), disputes over the "Mann's Lick" location and titles carried on until the late 1800s. In an 1877 Kentucky Court of Appeals case, *Brooks vs. Frizby*, the court ruled that there was no sufficient evidence available, maps or otherwise, to accurately locate Mann's Lick (Chinn 1912). However, there is no doubt that the focus of the Mann's Lick salt-making was on Mary Todd's property and the property immediately surrounding her. Joseph Brooks, James Speed, George James, Daniel Sullivan, Bracket Owens, William Gerrard, Colonel James Francis Moore, Levin Powell, George Slaughter, James McCauley, and John Hamilton owned land on and around Big Island and Mann's Lick Creek, and all were engaged in the salt trade to some extent (McDowell 1956:36-37). Joseph Brooks leased Todd's property in 1787 to start a saltworks. In 1788, there were disputes over Todd's title, and Colonel William Fleming and James Speed each claimed a quarter of the property (These disputes were due to overlapping adjacent entries created by Colonel Bullitt's unauthorized 1773 original surveys of the area.). As a result, salt was extracted from the original Todd surveyed land by separate saltworks built by Brooks, Fleming, and Speed. Charles Beeler, Colonel James Francis Moore, and William Pope built saltworks on adjacent properties.

McDowell rigidly placed Mann's Lick salt production at 1787, when Brooks began his saltworks on the Todd property. However, there were newspaper reports of settlers being killed on their way to Mann's Lick as early as 1780. McDowell believes the 1780 account mentioning "Mann's Lick" was a mistake, and that "Bullitt's Lick" was intended. (1956: Note 77). He also discounted Jillson, citing Collins, who stated that Mann's Lick operations began "before 1786." For proof that production did not start until 1787, McDowell offered affidavits by Brooks and statements from other legal proceedings. However, there are some flaws detected with using these citations to corroborate the first date of Mann's Lick salt production. Brooks did not arrive in the area until after 1784 and may not have been aware of or concerned about earlier salt-making activities. Also, many of the lawsuits cited were referring to salt-making occurring specifically on the Todd property. To the contrary, in several accounts in the Shane and Draper manuscript collections (in 1779, 1783-1784), settlers had reported eluding Indian attacks by escaping to Mann's Lick. There would not have been a reason to head for Mann's Lick, unless they knew people were there and protection could be afforded. As previously mentioned, Clark arrived at the Falls with other settlers in 1778, and it is almost certain some salt-making activity would have been carried out at the closer salt lick. Maybe the point of contention here is what was meant by salt "production." In other words, McDowell may have been making a distinction between salt produced for personal use, versus salt produced in large commercial quantities.

The Mann's Lick saltworks has been called "second only to Bullitt's Lick itself in importance" (McDowell 1956). However, careful review of early documentation does not necessarily support this claim of Mann's Lick's "lesser" importance. When Colonel William Fleming visited Bullitt's Lick in 1779, he wrote in his journal, "*they have 25 kettles…which they keep constantly boiling*." He mentions a yield of three to four bushels in a 24-hour period. Around 1794, Judge Harry Toulmin interviewed Colonel James Francis Moore, who owned one of the saltworks close to Todd's Mann's Lick farm. Moore told Toulmin there were 720 kettles at his saltworks, operating 24 hours a day, seven days a week (Toulmin 1794:106). In the end, Colonel Fleming claimed land at Mann's Lick, not Bullitt's Lick (McDowell 1956:37).

In practically every historical documentation of Bullitt's Lick, there is also a mention of Mann's Lick. When Lewis and Clark made their Great Trek westward, they compared the quality of brine they discovered to both licks (Fisher 1812:255). In Kentucky's early geological surveys, the qualities of both licks are analyzed. In the perusing of early newspapers, it can be seen that Mann's Lick is mentioned as many times as Bullitt's Lick. As far as the purchasing customers were concerned, there were indications that Mann's Lick salt was the preferred "brand."

Regardless which lick was the first or best, the historical importance of both Bullitt's and Mann's Lick saltworks has been seriously overlooked. The only reason for settlement locations, like Shepherdsville and Fairdale, was due solely to the nearby salt deposits and salt-making activities. Salt-making was the very first industry of Kentucky and no thorough historical economic analysis has been done. Another point not fully explored to satisfaction was the *reason* for the vigorous and violent Native American opposition to settlers coming to the most productive salt-making areas. Was pioneer encroachment the only reason for the violence? It makes one wonder if the Native Americans were also protecting their rights to the areas they used to procure salt. Perhaps they were well-aware that permanent settlement in the salty areas would stop the animal migrations upon which they depended. Could this have been the reason Kentucky had but a few permanent Native American settlements when the frontiersmen arrived? Archaeological or historical documentation could not be found to shed light on this aspect of inquiry. Hopefully, there will be more research conducted to develop and complete the story of Mann's Lick.

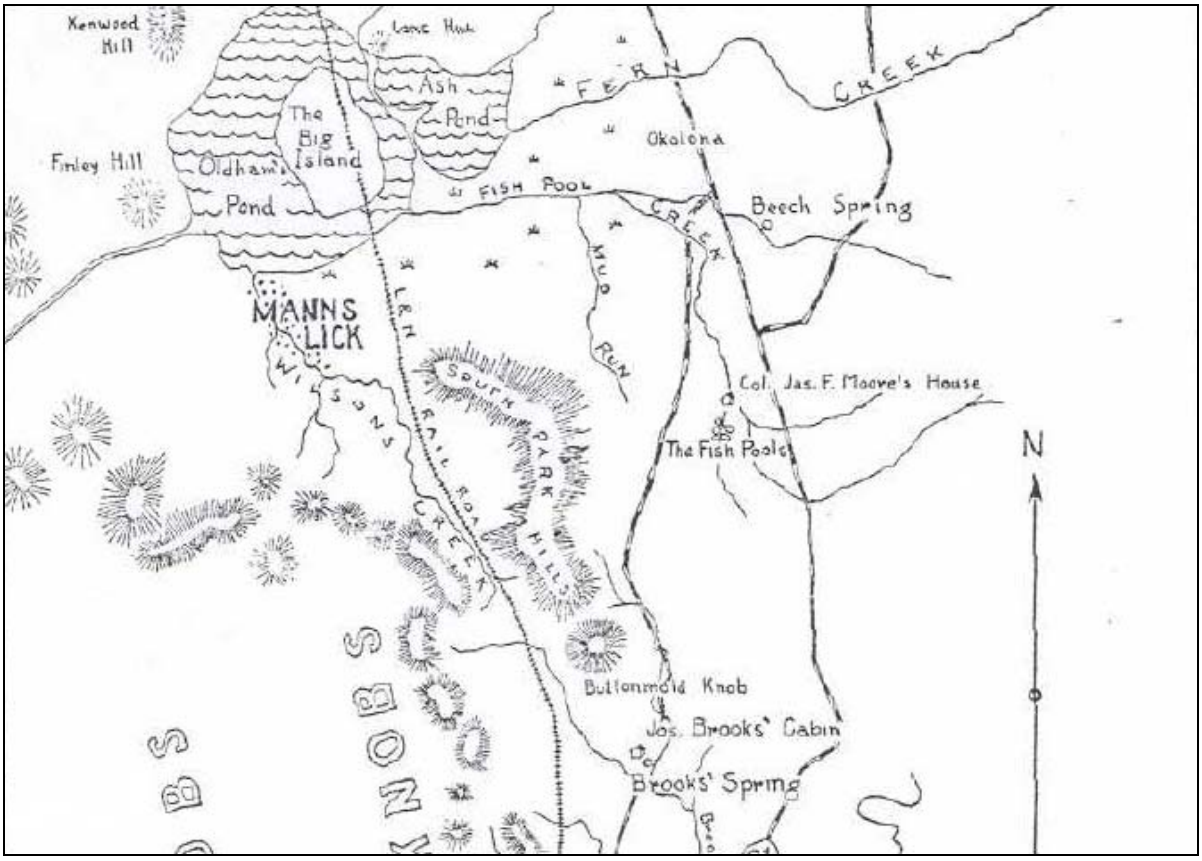


Figure 12. From McDowell 1956.

Early Historic Context of the Wet Woods

As discussed above, the Wet Woods was a low-lying, swampy forest located just north of the JMF area in south central Jefferson County, bounded by Newburg Road on the east, Standiford Field on the north, the Outer Loop on the south, and National Turnpike on the west. The Wet Woods fed Pond Creek. Pond Creek drained a total of 126 square miles of land with several creeks and springs, such as Duck Springs Branch, Greasy Creek, Blue Springs Branch, Fern Creek, Fishpool Creek, McCawley's Run, and Wilson's Creek (Jones 1978). Pond Creek then fed the Ohio River. Often in times of heavy rains, backwater from the Ohio River made its way into the Wet Woods.

Robert E. McDowell, in tracing the path of the historic Wilderness Road of Kentucky, has this to say about the Wet Woods:

> *Big ponds lay in the heart of the Wet Woods. They were fed by numerous creeks…..Eventually they all joined to form Pond Creek. But it was the beaver that had made both ponds and swamp by damming these streams. The beaver soon vanished, trapped out by hunters from the Falls, but the swamp remained. The trail, which forged straight ahead through the eastern reaches of the Wet*

> *Woods, was treacherous and nearly impassable during high water. Some of the mud holes must have seemed nearly bottomless and there are tales of oxen and mules miring to their bellies in the gooey muck* (McDowell 1967:12).

Early maps show the Wet Woods area to be dominated by one large pond in particular named Oldham's Pond (**Figure 13**). This timbered swamp was larger in the winter and wetter seasons; the more northeasterly portion of it was drier (presumably more shallow) at other times of the year. A plank road was built across the swampy area. Peavine Slough separated the two areas. Two large islands were located in this swamp. The smaller one was named Lost Island, and the larger one Big Island.

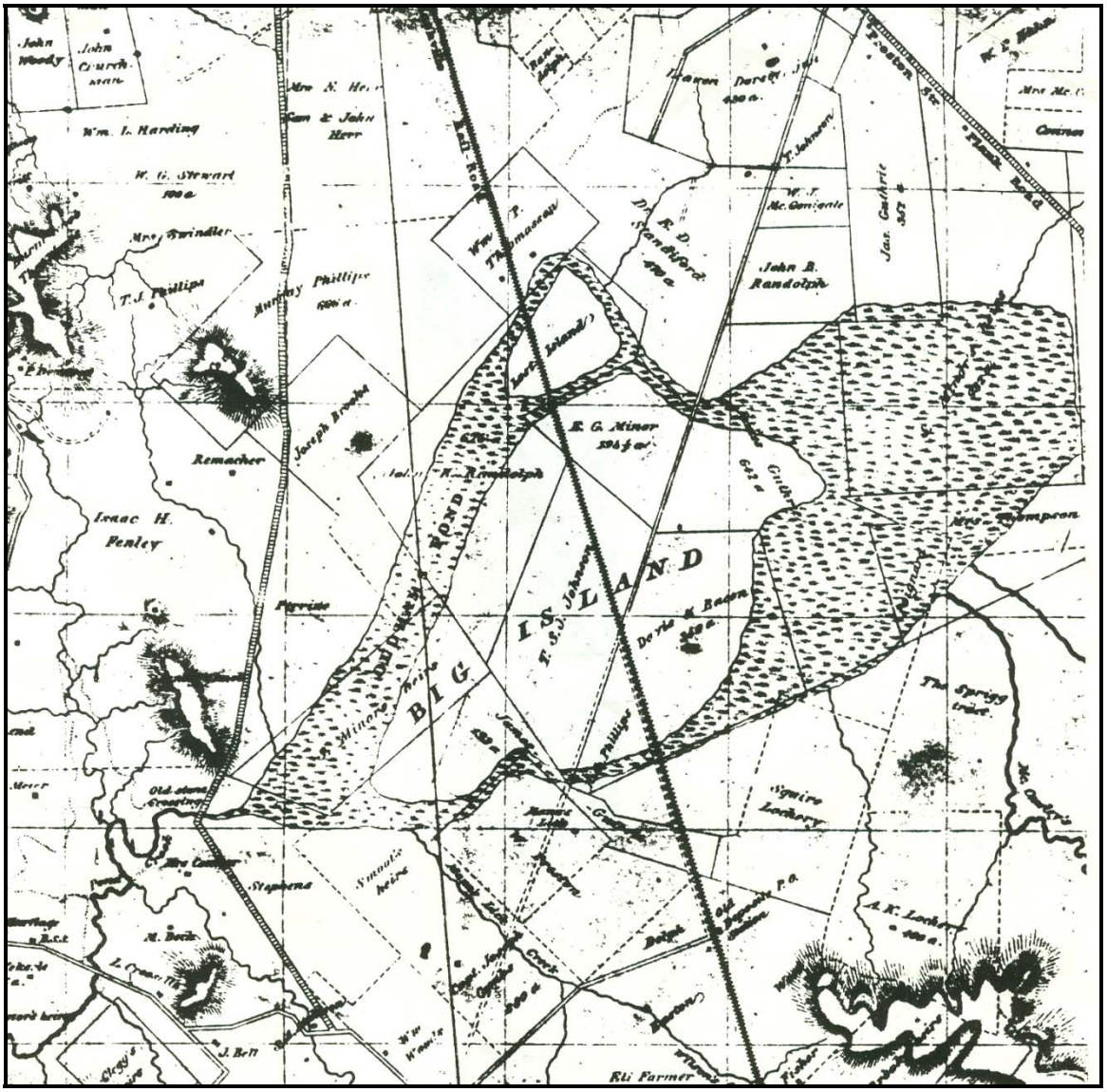


Figure 13. 1858 G.T. Bergmann map showing the project area in relation to the historic ponding of the vicinity.

The Wet Woods was a mysterious and at times, a mythical place, with a long history and an abrupt ending. The Wet Woods was well known by the early settlers of Louisville and became notorious throughout its 150 years of history. The isolation of the Wet Woods made it seem mystical as well as dangerous. During high water, the area was impassable throughout the nineteenth century. But in the late 1700's and early 1800's, the Wet Woods were crossed frequently by settlers moving west along the Wilderness Road that passed nearby on what is now Preston Street (McDowell 1967). The Wilderness Road extended through the Appalachian Mountains to Louisville and was one of the only thoroughfares for western expansion.

On the edge of the Wet Woods the land was fertile, and in the early 1800's, several large farms and plantations sprang up. These were owned by prominent people of Jefferson County such as James Guthrie, William Preston, William Bullitt, Leavin Dorsey, Jr., William Oldham, George Slaughter, James Speed, Jenkin Phillips, E.D. Standiford, E.G. Minor, and Joseph Brooks.

In the 1870's, Jefferson County was divided up in precincts, and the names of the precincts often reflected the geography of the area; the Wet Woods area was known as Spring Garden and The Woods (**Figure 14**). This part of the County was not well suited for plantations due to the presence of the large swamp. While much of the land in this area was wet and undesirable, along the edges surrounding the Wet Woods, the land was quite fertile and useful. This type of geography was usually not desirable for large wealthy agricultural operations and was more suited for small, lower status farms. But some of Louisville's earliest settlers recognized the potential of the Wet Woods region and built plantations.

During the 19th century, the only road to cross the Wet Woods was Plank Road, now known as Preston Highway. It was called Plank Road because it was constructed using a "corduroyed" technique in which logs were laid across the road to keep horses and wagons from sinking into the muck that was common along it (**Figure 15**). Often the logs would have to be replaced because they, themselves, would sink (McDowell 1967). In times of high water, the road was impassable even with the planks; an alternate route had to be taken, which was an old bison trail now known as Old Shepherdsville Road. The Louisville & Nashville Railroad was able to traverse the Wet Woods by the 1850's, but with great difficulty. The railroad utilized Lost Island and Big Island, dry areas located in Ash (Oldham's) Pond (**Figure 15**).

After the Civil War, the Wet Woods was settled by freed slaves, in an area known today as Newburg and Petersburg. The freedmen talked of log cabins, the church, and the good relationship with the whites. Often, they talked about their lives on the plantations in the area, usually about working for good masters. These accounts may be the result of the 19th century white upper class mentality that was common though out the south, that slaves were not adaptable to a free society and ought to be treated more as animals than as humans. This prompted many whites to care for their slaves as they would animals (Andrews and Young 1992), although there were a few exceptions. In one case John Huntley, from the Pascal Craddock story, had smallpox and no one would go near him except his faithful slave, Aunt Liza Travis. "*Liza nursed him to the last, and he set her free before he died*." Not only did he free her, he also gave her a two-story log cabin, furniture, 2,000 dollars, and a small farm. She became a wealthy woman in the 1830's and 1840's and began taking care of Negro children given to her by the Louisville slave market till they grew up and were eventually hired out by local plantations. She went on to found the town known as Wet Woods (Dye 1919).

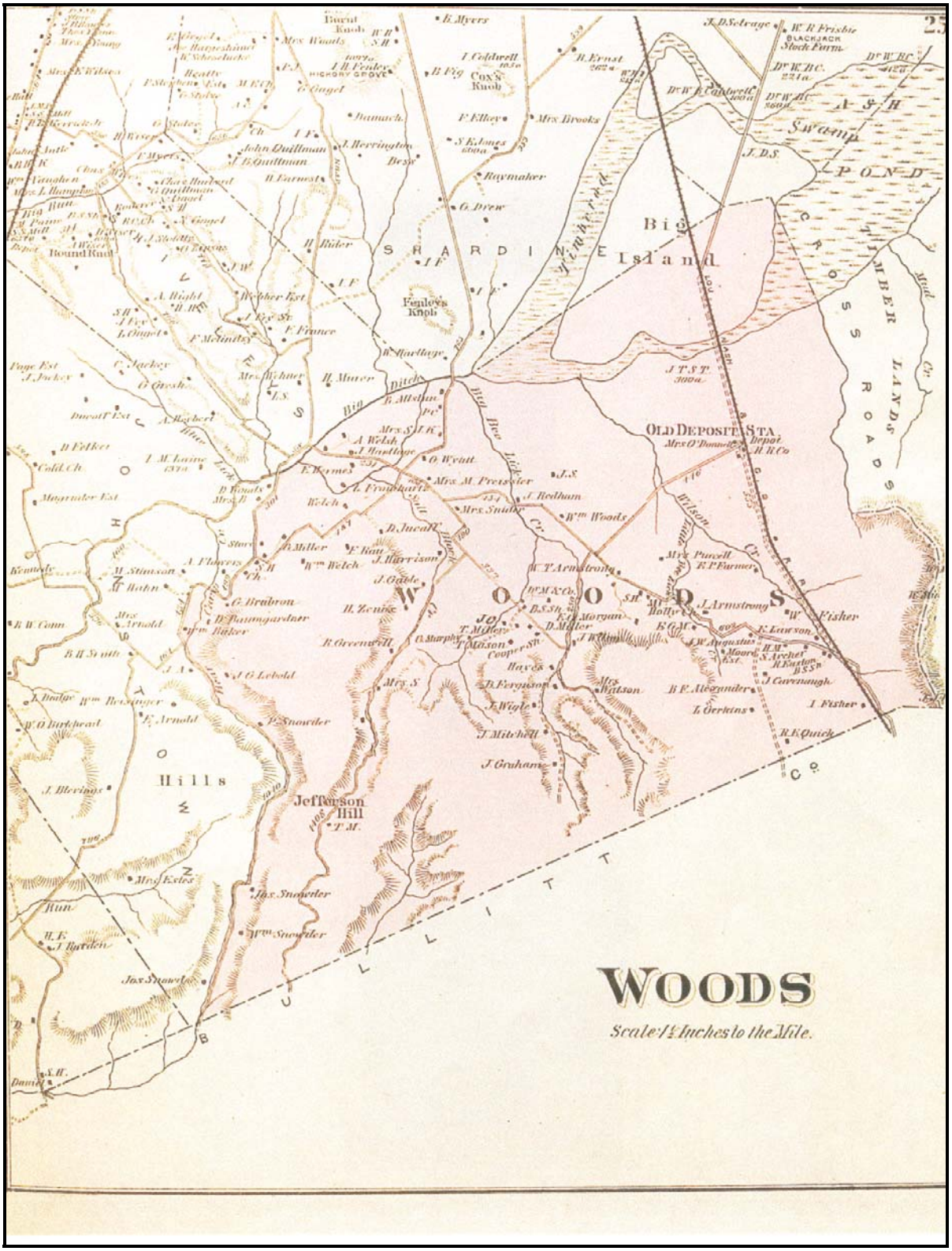


Figure 14. 1879 Beers and Lanagan map depicting Ash Pond and Big Island in upper right corner.

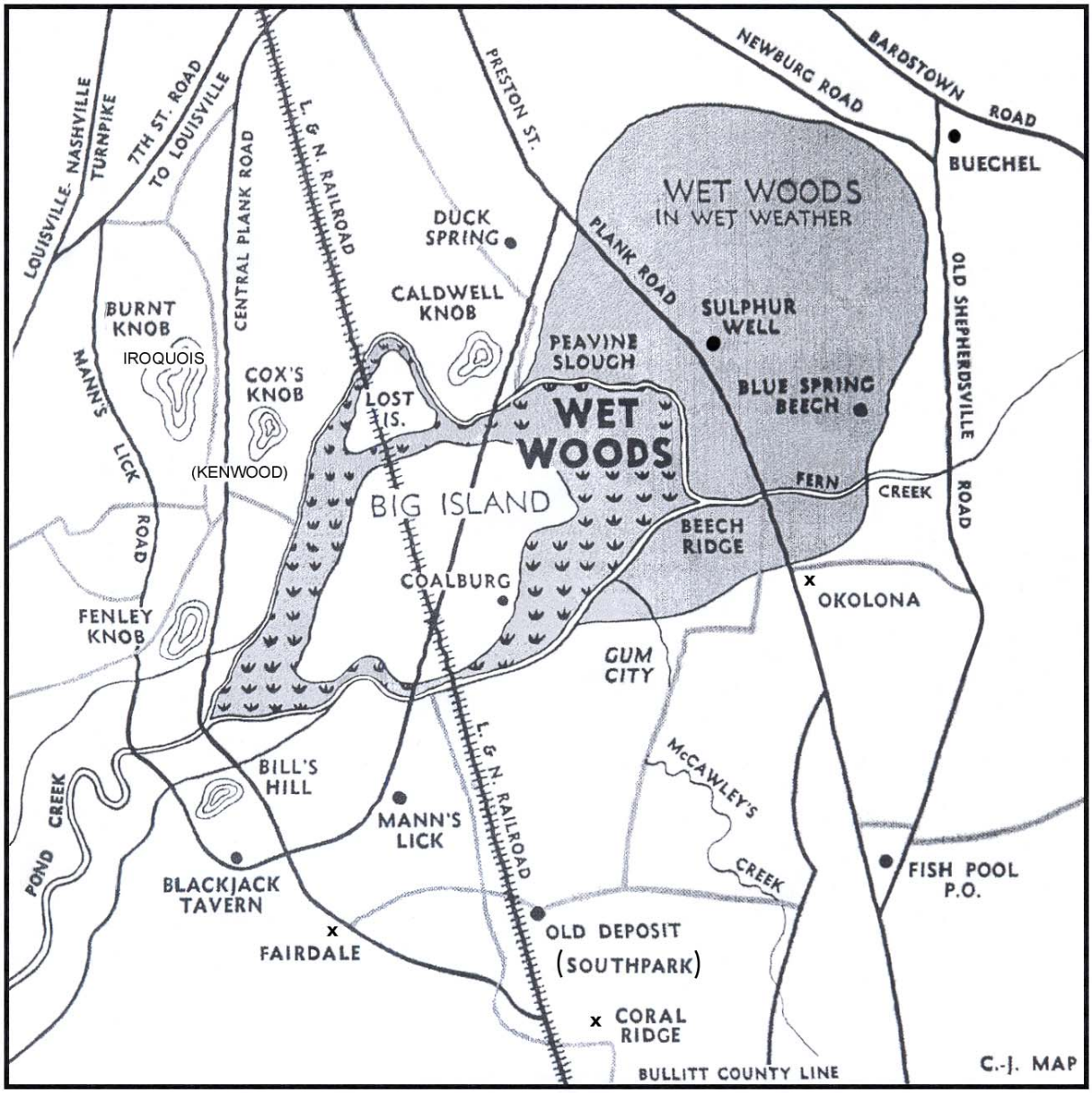


Figure 15. 1941 Map of the Wet Woods and adjacent areas showing former communities and features (*Courier-Journal* 1941)

The freedmen and their descendants supported themselves in a variety of ways, usually working for their former masters or the, "white folk," doing much of the same kind work they did when they were slaves. This was typical for much of the South after the war; plantations hired former slaves as farm hands, tenant farmers, cooks, and maids. Some former slaves told of chopping wood for 40 cents a cord that was pure profit because the wood was free. Though they had been freed, it was difficult for the former slaves to escape their prior existence. Blacks were seen as lower in status, culture, and mentality and the white gentry class still demanded their obedience and respect.

The church was very important to these people and they usually attended The Forest Baptist Church. In 1919, The Rev. J.D. Davidson described the baptisms and revivals held at the church pond, which attracted blacks and whites from miles away (Dye 1919). Rev. Davidson also discussed the black's relationship with whites:

> *They (the blacks) are nearly all descendants of the slaves who lived on the plantations near here and their houses have been passed down through generations. They work and they are thrifty and they are generous and courteous. They worked for good masters in the slave days, and they taught their children the proper kind of respect for the white people who deal with us today. On the other hand we get the best kind of treatment from the white people who are our neighbors - especially those who have been brought up in this vicinity, as our people have been. From the fine homes out at Newburg and in the suburbs of Louisville they come sometimes to visit our services in the church. I am a Negro and know the feeling that tends to exist between my people and yours, but the relationship out here is an inspiration, for it is mutual fairness and courtesy, and we keep our place.*

This is proof that the Wet Woods was truly an isolated place where the attributes and the results of slavery were still evident fifty-five years after the Civil War; this was also a time when the strict segregation of Louisville became almost as cruel as slavery itself. It is possible, that due to the isolation, this area evolved into a unique post-slavery society with a stratified, mutual respect that was passed on though generations.

The Wet Woods was an area of tangled woodland teaming with wild life--a hunter's paradise. Long term resident Hunter Baird, the son of a former slave, recalled in 1919 that young boys spent many happy days hunting possum in the Woods (Dye 1919). It has been said that the local farmers would venture into the woods "armed with pitchforks" and catch large catfish, carp, and buffalo fish. Sometimes, when the area was flooded, the fish would wander into the Wet Woods through the backwater from the Ohio River and get trapped. When the water receded, the fish were easy prey for the farmers (Hardaway 1941).

Farmers would turn their hogs loose into the woods to fatten them up on beech mast and acorns. The farmers marked the pigs' ears in order to keep track of them but the animals tore their ears on briars, making identification impossible. Many litters were born in the Wet Woods and before long, there was an abundance of wild hogs. Eventually the farmers had an understanding that whenever one needed a hog he would "shoot the first hog he saw, tie it to his horse's tail and drag it home." The hogs were also a hazard; Hardaway wrote, "Being treed by a wild hog was not uncommon" (Hardaway 1941). In the area of Duck Springs, it was said that prior to the war between the states that, "wild ducks abounded at this spot and was a hunters' mecca." (Kiser 1938).

The Wet Woods was also a dangerous place, notorious as a hang-out for thugs and thieves. There were numerous taverns and inns throughout the Wet Woods that were known to have nightly brawls. These places were also hangouts for freed slaves. During World War I, soldiers from nearby Camp Taylor discovered the taverns of the Wet Woods and frequented the establishments as well. People feared the Wet Woods because its isolation meant that it was outside the boundaries of the law.

Because the Wet Woods was a mysterious place, unknown and feared by many, it became the setting for many myths and stories. Perhaps the most famous was that of the ghost of Pascal Craddock, a story familiar to the children of freed slaves. In the 1820's at the Hunley family farm, now known as Bashford Manor, lived John Hunley, the last of the Hunley clan. He was a bachelor with no known relatives and in his old age, he began to divide up his estate. He gave most of it to his old slave, Aunt Eliza Travis, but he died before he could give away the central part of the estate. It was left unattended for eight years. Pascal Craddock appeared on the scene claiming to be the son of Hunley's half-sister. Craddock, a skilled lawyer, claimed the estate without dispute. During the years 1828 to 1861, farmers in the area suffered losses of horses, cattle, and slaves. At first, thieves hiding out deep in the Wet Woods were the suspects, but there became growing suspicion that Craddock was behind the robberies, for he had not suffered any losses. Thirty of Craddock's neighbors sent him a warning which he did not heed; he was eventually found bound in a meal sack, his body filled with a dozen slugs. Upon the search of his mansion, it was discovered that he had been smuggling counterfeit money, horses, cattle, and slaves to the Confederates. Forty years after his death there were still encounters with the ghost of Pascal Craddock, wiggling though the forest in his meal sack (Hardaway 1941).

There were several other stories from the Wet Woods. There was one about Jim Snawder who got lost with his cow on his own property in the Wet Woods for a day and a night. Another told of a farmer being pulled into the swamp after he had speared an enormous fish with his pitchfork. Near Ashbottom Road was a place where charcoal was burned and charcoal buyers would pick up load for transport to Louisville. Often flaming wagons were seen streaking across the Wet Woods when the charcoal buyers were impatient and loaded smoldering charcoal into their wagons. There were also stories from Duck Pond, which was fed by Duck Springs. Deitrich and Herbert Kalmey told a story their grandfather, Dietrich Boderman had told them, about hundreds of cattle drinking from the pond and the level of the pond never lowered no matter how much water was drawn from it (Hardaway 1941). Another legend existed that Duck Pond was known to be bottomless and Adaline Schaaf remembers hearing the story of a team of oxen falling in the pond and was never seen again.

Today, the Wet Woods are no more. Throughout the twentieth century, a series of ditches were dug to drain the Wet Woods. In 1941, only a few 100-acre patches of the Wet Woods were left. But this was still enough for a four-year old girl to get lost for a day and a night, requiring a large search party to find her (Hardaway 1941). Now, the area is the site for much of Louisville's industry and garbage. A complex network of ditches lines the land and the woods are almost gone. The small streams in the area have now been channelized and straightened, and deeper drainage ditches created. The Southern Ditch is the principal of these structures. Today the large Oldham (Ash) Pond depicted on the early maps and the remaining low-lying areas of this portion of Jefferson County have been filled in due to the longstanding and intensive expansion of the city of Louisville to the north. However, the area is still generally low and wet, holding water during especially heavy rains. People still live in the area, but the Wet Woods are gone and they live in the suburbs of Newburg, Petersburg and Okolona. The small, isolated society that once existed is no longer; it was displaced by urban expansion and exploitation, just as the Wet Woods. The

people of the Wet Woods, who had been shielded from the segregation laws of Louisville in the early twentieth century, were finally engulfed by the city and its racial structure during the 1930's and 1940's. The Wet Woods was not just large swamp…it was a mysterious and isolated piece of nature with good people.

Twentieth Century History

Landowners within JMF during the early twentieth century were documented by the Louisville Title Company in 1913 (**Figure 16**, **Figure 17**, **Figure 18**, and **Figure 19**).

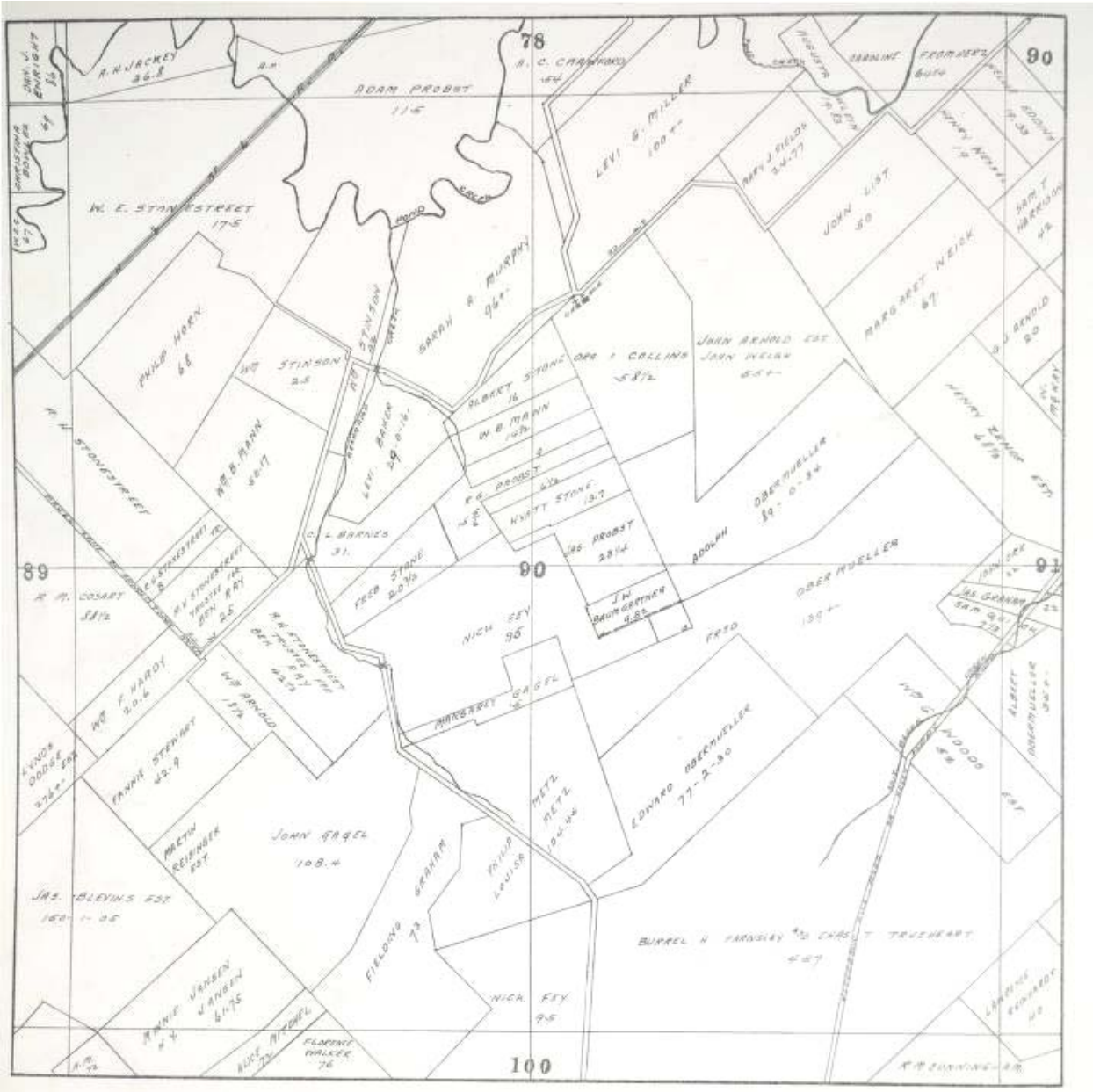


Figure 16. Page 90 of the Louisville Title Company 1913 atlas. Lands owned by Stonestreet, Reisinger, and Metz are visible. Courtesy of University of Louisville, Special Collections www.digital.library.louisville.edu

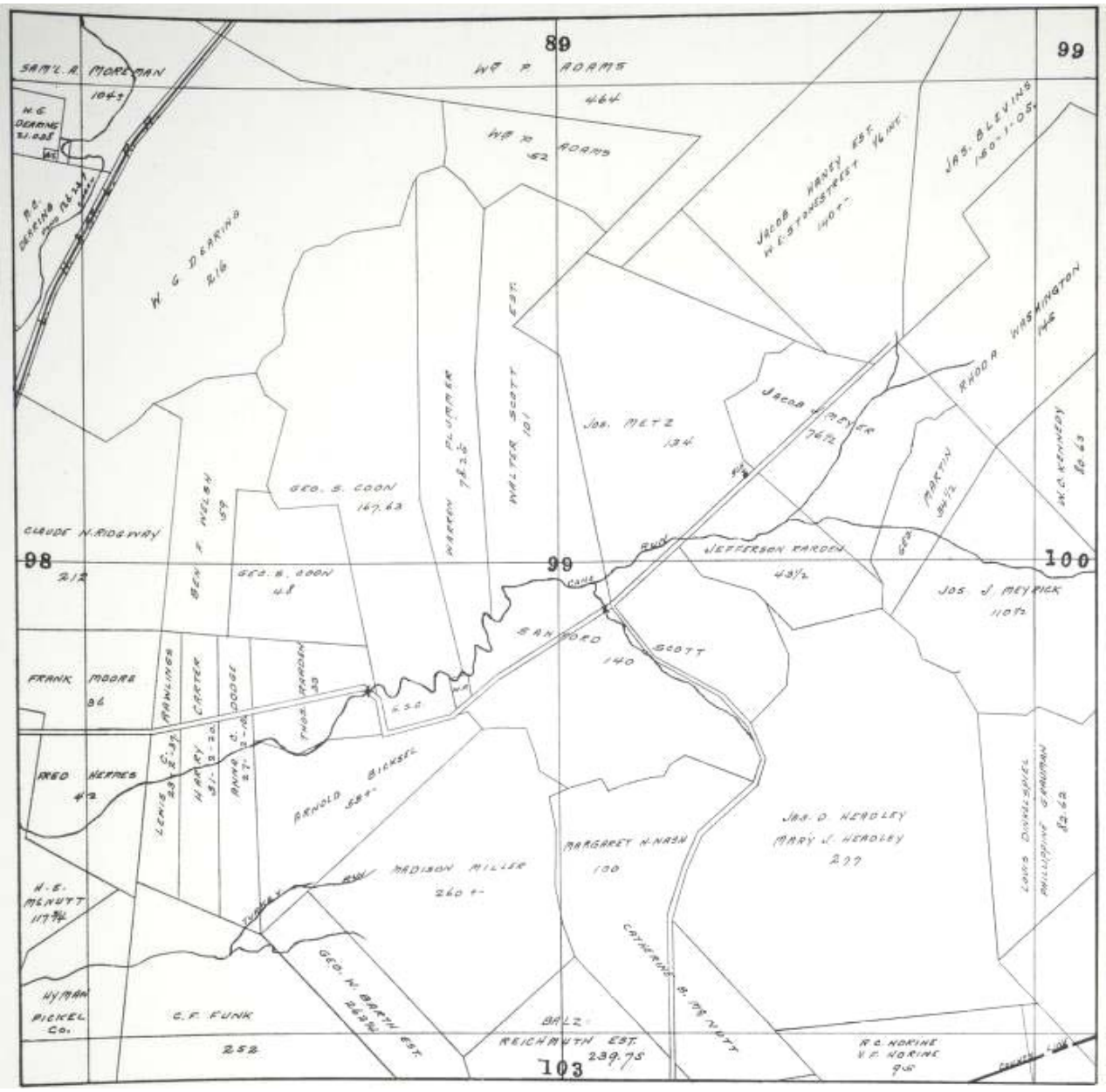


Figure 17. Page 99 of the Louisville Title Company's 1913 atlas. Lands of Blevins, Rarden, Headley, Metz, and Scott visible. Courtesy of University of Louisville, Special Collections www.digital.library.louisville.edu

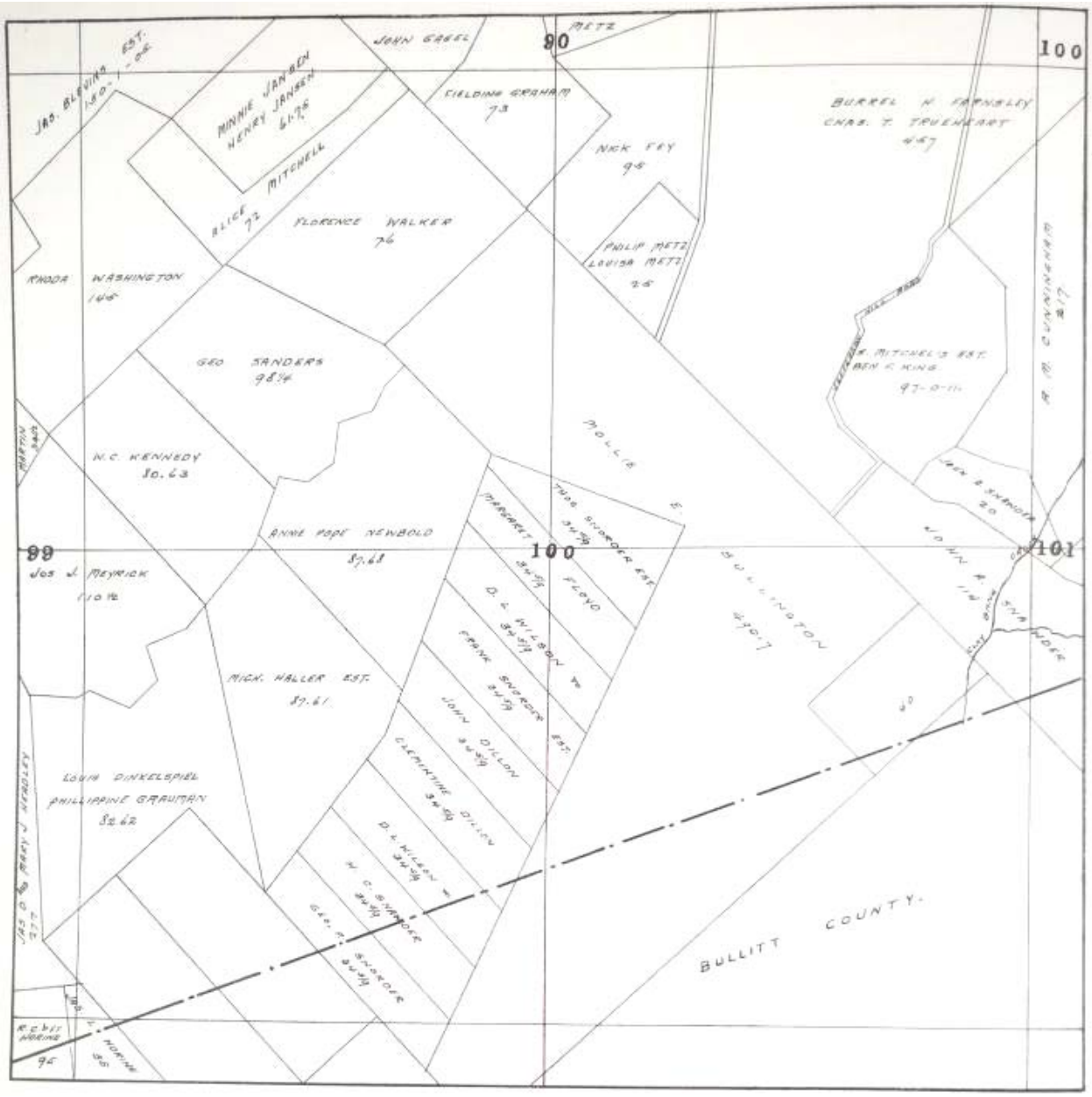


Figure 18. Page 100 of the Louisville Title Company's 1913 atlas. Lands of Snawder and Metz visible. Courtesy of University of Louisville, Special Collections www.digital.library.louisville.edu

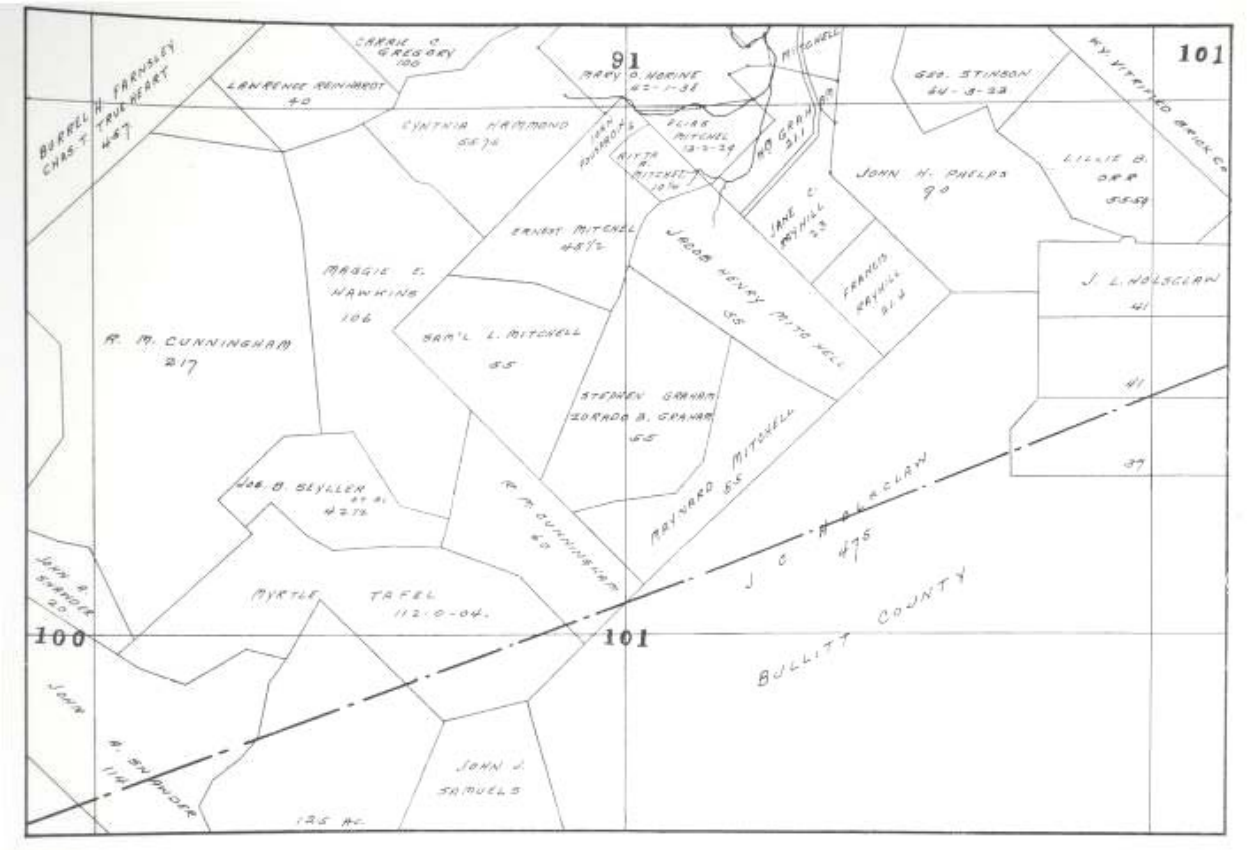


Figure 19. Page 101 of the Louisville Title Company's 1913 atlas. Lands of Horine, Holsclaw, and Mitchell visible. Courtesy of University of Louisville, Special Collections www.digital.library.louisville.edu

The Fairdale area played an important role during the global conflicts of the early twentieth century and the national environmental movement of the 1970's.

Camp Zachary Taylor was a World War I-era military training camp located in Louisville. It opened in 1917 to train soldiers and by 1918 had become "the largest artillery training camp in the United States up to that time" (Kleber 2001:159). Due to limitations on growth at its Louisville location, the camp was closed by 1921.

As part of the training, several rifle ranges were created. One of these was at West Point, Kentucky, southwest of JMF. According to Lois Pinguely, the Pinguely tract recently acquired by JMF was once used by soldiers from Camp Taylor during World War I as a firing range. Ms. Pinguely's brother Bob Lamkin, who owns the adjoining parcel, has identified two concrete target areas on his property and concrete foundations presumably attributable to latrines and huts on the Pinguely tract. No historical documentation of this range could be found, but additional information could be gathered via archaeological investigations.

Holmberg (2002:159) mentions a rifle range associated with Camp Zachary Taylor in the vicinity of the JMF; however, this one was located to the east near South Park Road. This appears to be well documented. The information presented below was graciously provided by Mr. Ken Maguire of the Camp Zachary Taylor Historical Society in Louisville. According to Mr. Maguire,

the rifle range was located approximately six and one half miles south of Camp Taylor (**Figure 20** and **Figure 21**). It was located south of the Outer Loop between the L & N railroad and Preston Highway. The City of Minor Lane Heights occupied the majority of the former rifle range prior to the city's relocation as a result of Louisville International Airport expansion (**Figure 22** and **Figure 23**) (Maguire 2008).

A description of the rifle range can be found in *A History of Construction and a Completion Report of Camp Zachary Taylor* (Lamphere 1917).

> *The Rifle Range consisted of 530 acres located approximately six and one half miles almost due south of the Main Camp. The Photo's above give you a glimpse of the range just after it was completed. The range was located just south of the Outer Loop between Preston Street and the L & N Railroad. The land was very level, and rectangular in shape. Across the length of the entire tract was a natural hill of 200 feet in height. This made for an admirable back stop for the targets. However, the low lying land was subject to flooding from a nearby creek during extremely high water. Extensive ditching was required to be dug to keep the range and the trench drained. The large ditch was over a mile in length. A small dike was also constructed to hold the backwater off of the range. The trench was lined with a wooden platform* (**Figure 20**)**.**
>
> *There were two Trenches, the Target Trench, and the Firing Trench. The Target Trench was 1,898 feet long. The Firing Trench was 2,794 feet long. The Target Trench, the shorter of the two, is the one shown in the photo's above. The digging of the trench and building the platforms took approximately 99,500 man hours, or 310 men, over eight weeks from start to finish. There was one Trenching Machine listed as employed, and 299 teams (of horses). It is most likely the Trenching Machine was for the use of trenching water and sewer lines. It is also most likely that teams of horses pulling graders were used for the purpose of digging the over one third mile long target trench.*
>
> *The Target Range is located about six and one half miles south of the Main Camp, consisting of 530 acres.The Target Range consists largely of of level land. At the end of the range and extending entirely across it, is a mirable back stop. Part of the rifle Range property is subject to overflow from a nearby creek during extremely high water, Extensive ditching was therefore required to obviate this difficulty. At the Rifle Range it was necessary to construct a large ditch, having the length of something more than a mile, to take care of the backwater from a small creek a short distance away. A small dike was also built to hold this backwater off the range.*

[Please note that all the above was transcribed verbatim from original documents. Including any errors that were present (http://camptaylorhistorical.org/contact).]

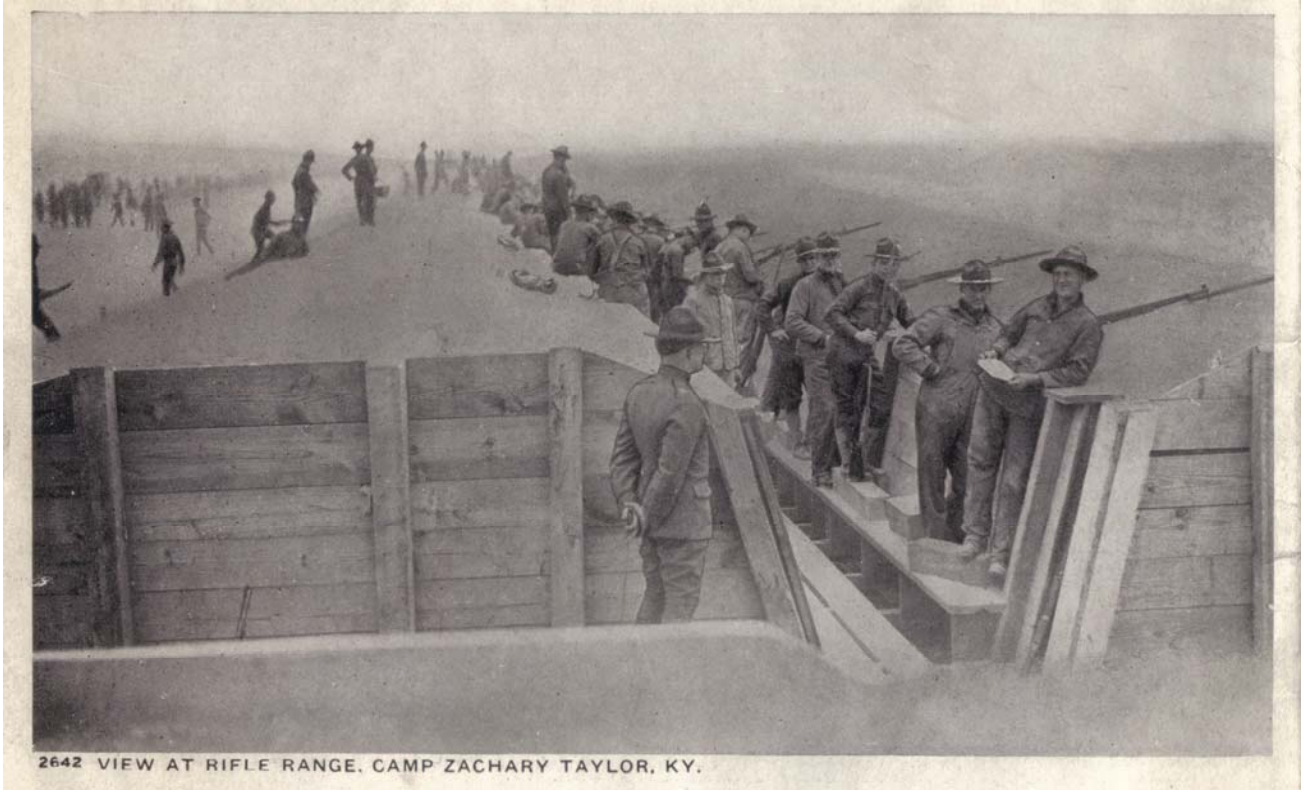


Figure 20. View depicting the CZT Rifle Range.

Photos courtesy of Ken Maguire, Camp Zachary Taylor Historical Society

Figure 21. Men resting after shooting practice. See old YMCA and the Knobs in the background.

The following is an excerpt from a brief written by the Louisville Board of Trade on May 30, 1917 to the War Department.

> *The Board of Trade Committee has made investigation of various Rifle Range within reasonable distances of the Camp Site in addition to those shown upon the maps. There is available to the Government, if it is desired, a Rifle Range located on the South Side of the South Park hills on the Louisville & Nashville Main Line Railroad, lying about seven miles from the Maneuver Site. It consists of a strip of ground 1,000 yards long and about 660 yards wide, bounded on the north by range of hills with steep contours rising about 500 feet above the level of the range, making a most excellent backstop. The Board of Trade Committee feels that the Government may have the use of this range during the time of the encampment, but owing to the fact that the owner, a leading patriotic citizen of Louisville, is at present confined in a hospital in the East and will not return to the city for several days, it will be impossible to secure the necessary title papers at the present time. Should it be impossible to secure this range there are two other ranges in the same location, one of which can undoubtedly be secured. Sufficient land, at least 100 acres at this range, is available for a large tenting camp and water is on the site in ample quantity. Approach to same from Camp site may be had by metaled roads of by direct railroad facilities from the Maneuver ground. The Committee regrets that it cannot make this offer in definite terms at the present time, but will forward it either to your board or to the General Commanding at the earliest possible moment. We trust the foregoing meets all the requirements of the Camp Site, Maneuver Site and Remount Station. We assure you of out earnest desire to secure this camp and bespeak your good officers in the premises.*
>
> *Respectfully submitted,*
> *Special Committee Louisville Board of Trade*
>
> *F. M. Sackett, President*

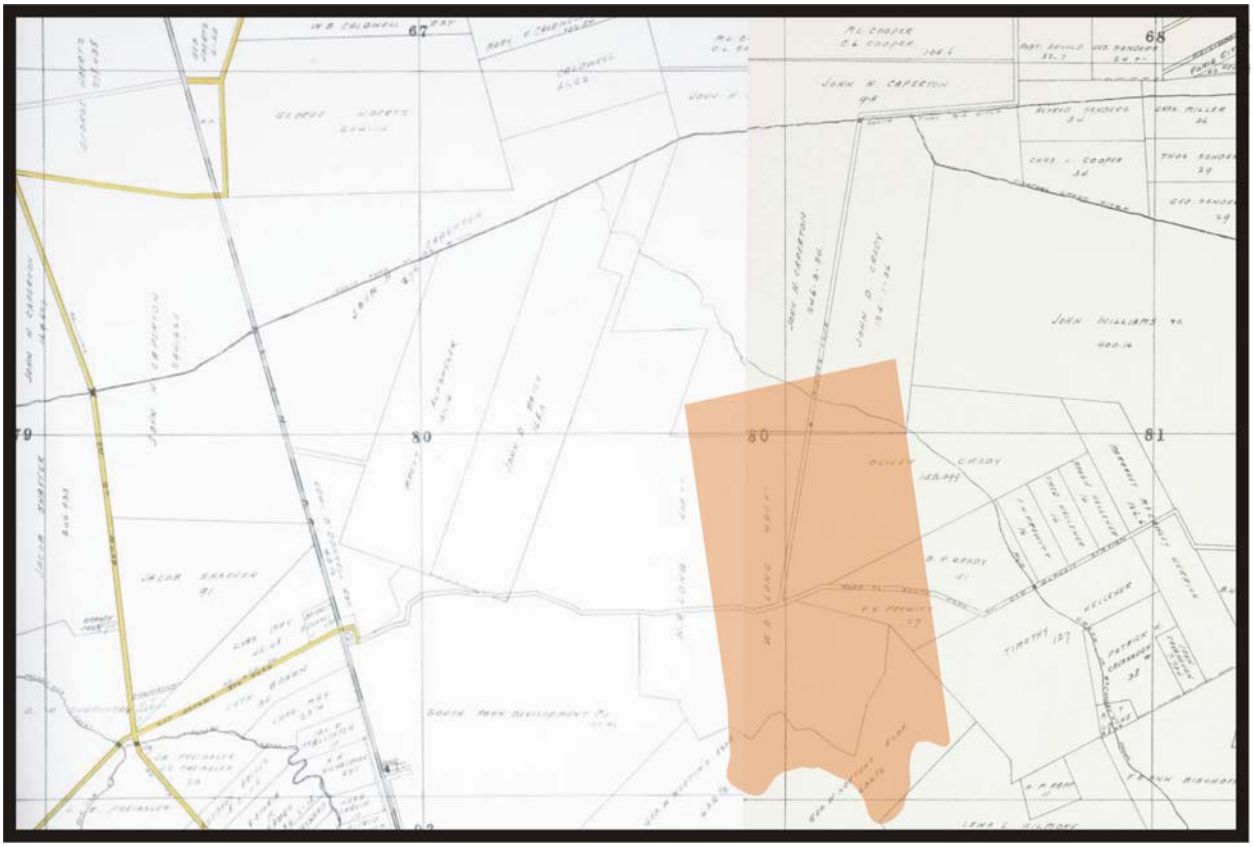


Figure 22. Approximate location of the South Park firing range overlain on a 1913 map of the area

The South Park firing range property was auctioned in 1921 by the Louisville Real Estate and Development Company as a result of the closure and privatization of the camp after only three years of use.

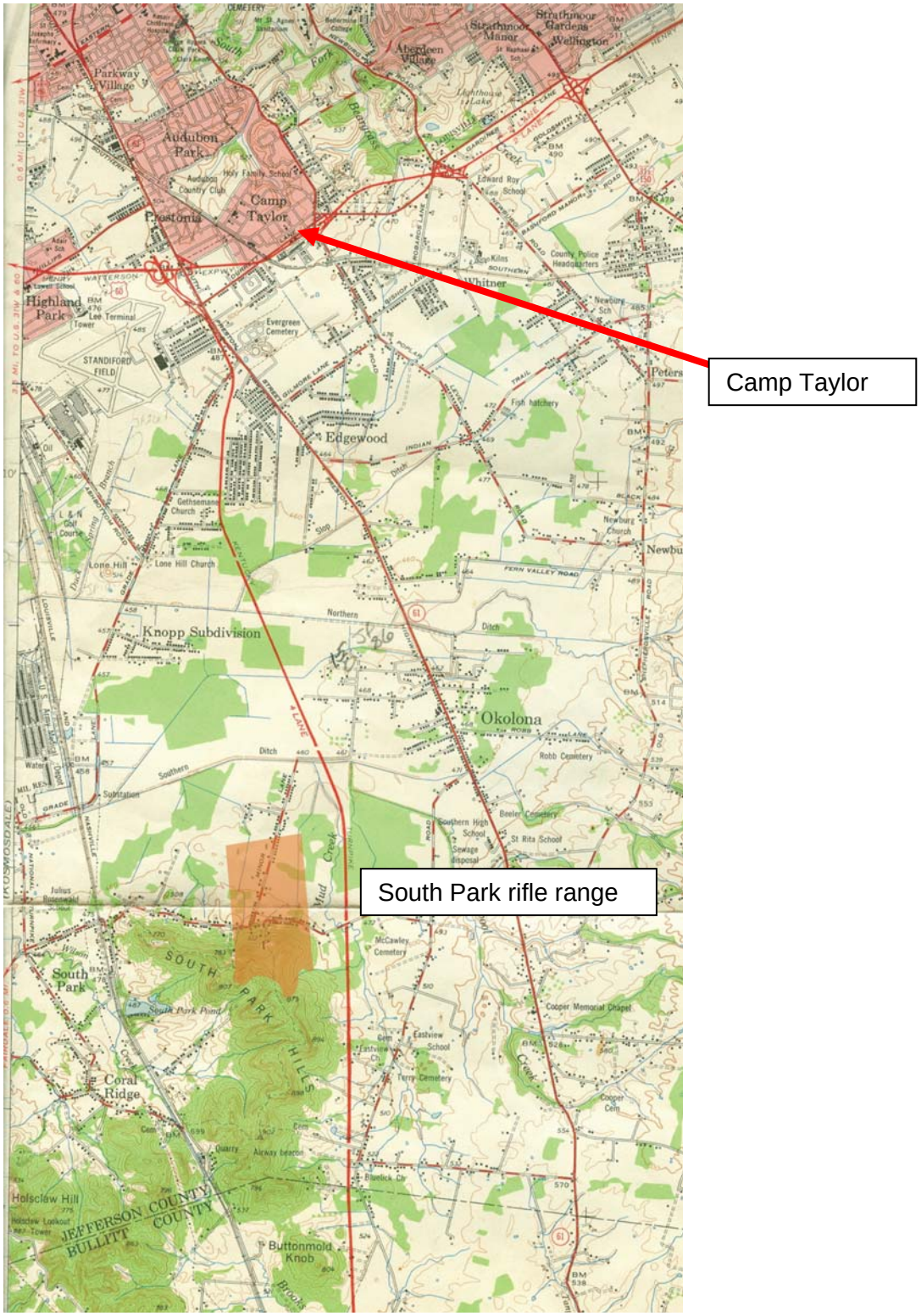


Figure 23. Location of the 550-acre firing range at South Park.

Valley of the Drums is an abandoned industrial waste site located adjacent and within JMF. The site was one of three sites used as case studies in the mounting push for a federal law regarding the management, remediation, and necessary funding of sites with extensive hazardous materials. While previous 1970's laws had dealt with the prevention of future pollution, a law dealing with sites such as Valley of the Drums seemed necessary. After the introduction of five different bills of similar scope, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as Superfund, was signed into law by President Carter on December 11, 1980 (Switzer and Bulan 2002).

In addition to Valley of the Drums, most citizens have heard of at least one of the other two cases that proved it was necessary to enact regulation—Love Canal in New York, which has become almost synonymous with Superfund. The third case was the dioxin-laden Times Beach site in Missouri, which had manufactured Agent Orange during the Vietnam War then changed hands a number of times (ENR 1997). Few people, however, knew that the Bullitt County site was on the same scale of pollution as Love Canal. Nor do most in the Louisville area realize Valley of the Drums was the third case used in the passing of CERCLA. Although the Kentucky Department of Natural Resources and Environmental Protection had known about the Valley of the Drums since at least 1967 and had successfully cleaned up a small portion of the site (Shepherd and Frost 1995), the extent of the pollution at this site--as well as others in the area--came to national attention in 1979.

Perhaps also surprising to many is the fact that Valley of the Drums was not an isolated occurrence. This region of Bullitt and Jefferson counties had long been known to be a place for industrial waste, including two other sites in Bullitt County and one in Jefferson County that also became Superfund locations. In a 1989 *Courier-Journal* article, Joseph Gerth summarized the three Bullitt County locations. The earliest documented occurrence began "in 1964, [when] A.K. and Christine Reising began operating an industrial waste dump on Brooks Hill Road which came to be called Tri-Cities". This location did not become a Superfund site, however, until 1988. Although cleanup has been considerable, the site is still listed on the National Priorities List (NPL); detailed cleanup activities may be found at EPA 2008a.

The third Bullitt County site was Smith Farm, which Gerth summarized as follows: "The next year [1977], the EPA discovered toxic chemicals were being dumped illegally at Smith Farm off Pryor Valley Road. It removed more than 6,000 barrels of toxic waste in 1984, but more than 100,000 barrels remain. The site is on the EPA Superfund list and will receive federal dollars to assist in the cleanup." Although still listed on the NPL in 2008, cleanup activities have succeeded in mitigating the environmental consequences of the illegal dump. Detailed cleanup activities at this site may be found at EPA 2008b.

Southwest of JMF lies the Distler Farm, another illegal dumping location. This 13-ac site is located along Blevins Gap Road near the confluence of the Salt River with the Ohio River. It is also listed on the NPL and is currently undergoing its fourth five-year review. Cleanup activities have succeeded in mitigating many of the environmental consequences of the illegal dump. Detailed cleanup activities at this site may be found at EPA 2008c.

In contrast to these two Bullitt County cases and the Distler Farm case, the Valley of the Drums has been used as a textbook example of why CERCLA was necessary and, until recent reports, as an example of a Superfund success story (Shepherd and Frost 1995). Valley of the Drums is located "off KY 1020 near the L & N Golf Course" (Gerth 1989). Site size is generally thought to be 13 acres, although the distribution of chemicals through the aquifer and aerial dispersal prior

to remediation was undoubtedly more extensive. Over a 10-year period, over 100,000 55-ga barrels were dumped at the Arthur L. Taylor site; some were buried and others were strewn about across the landscape or dumped in pits or trenches (EPA 1981). According to the EPA (1983), "the chemical wastes were largely from the paint and coatings industries of Louisville. Air, surface water, ground water, and soil are contaminated with organic and inorganic chemicals." Pollutants leaking into the nearby branch of Wilson Creek included heavy metals, benzene, toluene, methylmethacrylate, trans-1,2 dichloroethylene, polychlorinated biphenyls, and many others (Cleveland State University 2008, EPA 1981, Spectrum 2008).

Sources differ on the amount of cleanup that has taken place. Prior to its designation as a Superfund site, a portion of the Valley of the Drums was cleaned up by the Kentucky Department of Natural Resources and Environmental Protection. According to EPA (1981), "EPA conducted emergency response activities in March 1979 under Section 311 of the Clean Water Act, and in September 1981 under CERCLA, at a total cost of $650,000. Through these response activities and voluntary removal of wastes by known generators, a majority of the surface wastes (about 17,000 drums) were removed. A system was installed to control and treat contaminated run-off from the site." In total, almost $2 million was recovered from responsible parties (the "known generators" noted above). Some sources proclaim the site has been successfully cleaned up (Environmental Citations Database 2001, Engineering News-Record 1997), but other sources suggest some barrels were removed but as many as 4,000 remain. Environmental remediation procedures that were emplaced in 1986 and 1987 included a cap of impermeable clay and groundwater monitoring prevented the remaining barrels from leaking into the surrounding water table. Detailed reports on cleanup activities at Valley of the Drums may be found at EPA 2008d. Overall, the efforts at Valley of the Drums have been viewed as successful. According to EPA reports:

> *The successful cleanup was accomplished through some notable achievements, including: a significant reduction of risks to local citizens and the environment due to several emergency removal actions; use of state-of-the-art cleanup technologies; combined efforts between the U.S. Environmental Protection Agency (EPA) and the Kentucky Department of Natural Resources and Environmental Protection (KDNREP); and recovery of $1.8 million of EPA's cleanup costs from polluters. The cooperative efforts among EPA, State and local groups culminated in a cleanup of tremendous proportions and a safe community and environment (ECD 2001).*

More recently, however, EPA assessments for another five-year study found additional hazardous materials outside the boundaries that had been capped. Part of this lies within the boundaries of JMF (Bruggers 2008). Valley of the Drums (A.L. Taylor site) has been taken off of the EPA National Priorities List of Superfund sites, stating:

> *The U.S. Environmental Protection Agency (EPA) announces the deletion of the A.L. Taylor Superfund Site in Brooks, Kentucky, from the National Priorities List (NPL) (Appendix B of 40 CFR Part 300 which is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)). EPA and the Commonwealth of Kentucky have determined that all appropriate Fund-financed responses under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, have been implemented and that no further cleanup is appropriate. Moreover, EPA and the Commonwealth of Kentucky determined that response actions conducted at the site to date have been protective of public health, welfare, and the environment. This deletion does not preclude future action under Superfund (EPA 1996).*

The same website states:

> *EPA identifies sites that appear to present a significant risk to public health, welfare, or the environment and it maintains the NPL as the list of those sites. Any site deleted from the NPL remains eligible for Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action in the future. Section 300.425(e)(3) of the NCP states that Fund-financed actions may be taken at sites deleted from the NPL. Deletion of a site from the NPL does not affect responsible party liability or impede agency efforts to recover costs associated with response efforts.*

Cleanup for the additional materials encountered in the last five-year study has been given a deadline of December 31, 2009 (Bruggers 2008).

Communities

Research into the communities that developed along transportation corridors over time, and the characterization of the people who used them, are invaluable in developing a historic context of the movement of people and goods in these areas. Small communities initially developed along creeks and transportation routes. Some were located at the crossroads of major roads. Some developed as small industrial towns. Some early settlements became abandoned when changing conditions made their locations less desirable. Others were able to adapt to the changes. Formal town planning also played a limited role in the early history of the area. The following discussion focuses on a few of the communities in and around the Forest.

Barrallton. This community with an extinct post office was located in Bullitt County about five miles west northwest of Shepherdsville. It lies along KY 1526 in the Knob Creek Valley. The community was most likely named for the family of the first postmaster, Joseph Alden Barrall (Rennick 1984:15).

Brooks. This community lies three miles north of Shepherdsville at the junction of KY 1020 and 1560. The area was developed around Brooks Station that was established on the main line of the Louisville & Nashville Railroad. Built in 1857, the station was most likely named for the family of Joseph Brooks, although some historians contend it was named for Joshua Brooks who actually built the line. A post office was established in 1858. It was first named Brooks Station, then as Mt. Vito (in 1867), and finally, in 1885, as Brooks (Rennick 1984:37). The earliest arrival of the Brooks family into the area was in 1779, when Joseph and Nancy Brooks arrived at the Falls of Ohio from Pennsylvania. In 1784, they moved to the Shepherdsville area as Joseph had obtained a job at the Bullitt's Lick Salt Works. The Brooks landholdings included at least 3,800 acres by 1810. The Brooks homestead was located along the Wilderness Trail. Today, the location is at the intersection of I-65 and Brooks Hill Road. The associated spring still may be enjoyed. Brooks was an influential early pioneer not only because of his vast land holdings, but also because, after three years working at Bullitt's Lick Salt Works, Brooks operated the first saltworks at Mann's Lick in southern Jefferson County. According to a Brooks descendant, the furnaces associated with this endeavor were located at the intersection of Blue Lick Road and Maryville Road. Today, the parcel includes light industrial buildings (*Courier-Journal* 2008).

Coalburg. Coalburg was an early twentieth century community located on the Big Island in Oldham's Pond in the heart of the Wet Woods (See **Figure 15** above). Charcoal making was the main industry of the Wet Woods at this time, and Coalburg supplied many Louisville

residents with the "summertime" fuel. Coalburg, located on Southern Ditch, was the principal supplier of the charcoal. Additional charcoal was made in **Gum City** located on Mud (McCawley's) Creek (Bates 1956:14). The ashes from the charcoal burning were used to make the roadbed for Ashbottom Road (Jones 1978:7).

Coral Ridge. This community began when Joseph W. Sanders moved the post office from **South Park** in 1927. In 1949, the Coral Ridge post office was moved to Fairdale at the request of the local residents (Rennick 1984:97) (See **Fairdale** below).

Cupio. The nineteenth century town of Cupio was located some twelve miles west of Shepherdsville in western Bullitt County. Cupio was never located on a rail line, but it nevertheless attracted business, at one time boasting three physicians, one lawyer, two saw mills, two livestock dealers, two wagon makers, a lumber dealer, a minister, two plasterers, a blacksmith, a nurseryman, and an artist (Kramer 2001:73). Some of these were gone by 1891; the general population approximated 100 in 1896.

Fairdale. As with many towns and cities around Kentucky, the city of Fairdale began as a store opened by John and Si Morgan in 1881. The client base for the store included residents drawn to the area surrounding Louisville and Nashville Railroad's **Old Deposit Station**, which had been established in 1850. Morgans' Store prospered and grew, and the surrounding settlement also expanded. The settlement, however, had no name, and the area became associated with the nearby Wet Woods. This swampy lowland extended from approximately where I-264 lies today to the knobs of Jefferson Memorial Forest. As is true with most swamplands, the area was considered undesirable and a wasteland. As such, it attracted the sort of people that needed just such an area in which to hide out. The Wet Woods became known as an area for criminals, bandits, and nomads—the dark forest of many fairy tales. By 1910, residents of the settlement surrounding Morgan's store opted to officially name the settlement and distance itself from the nefarious reputation of the Wet Woods. Fairdale was the name suggested by Mr. Oscar Reed and was accepted. Fairdale attained its first post office in 1949 when the post office that had been at **Coral Ridge** was moved to Fairdale. The present Fairdale post office location was established in 1955 (Kleber 2001: 279; Nelson n.d.a; Rennick 1984:97). Fairdale has been the subject of newspaper articles (Sinclair and Brong 1965) as well as been featured in national magazines—as the June 1951 *Good Housekeeping* Town of the Month.

Mt. Holly. Prior to being named Fairdale or being associated with the Wet Woods, the Fairdale area had been called Mt. Holly, a moniker bestowed by Col. James F. Moore in 1779. As the surrounding hills were covered in holly trees, it seemed an appropriate label. The name was also used for the first school in Fairdale, Mount Holly School. Built in 1823 on land from Joseph Gherkin and later John Farmer, the log structure consisted of one room. A replacement Mt. Holly School was built in 1842. This school, also of log, was located where the Mt. Holly Cemetery is and was used until 1913 (JMF n.d.e). Both Gherkin and Farmer are interred there. Today, the Mt. Holly name is attached to a road, the cemetery, and businesses in the area such as the Mt. Holly Video and Fun Zone (previously the Mitchell Hill Café).

Newtown. Approximately 100 years prior to Fairdale's founding, the only settlement in the area was Newtown. "New Town" was incorporated by an act of the 3rd session of the Kentucky General Assembly in 1794 on lands owned by Colonel James F. Moore, adjoining the lands of James Speed and Joseph Brooks (Governor Isaac Shelby Correspondence File - Enrolled Bills 1792-1794). The trustees appointed were Abner and Lewis Fields, Basil Prather, Isaac Hornbeck, and James Standiford.

Colonel Moore's Newtown was just south of Mary Todd's Mann's Lick farm. The Field brothers of Lewis and Clark fame were close friends of Colonel Moore's. Abraham Field, their father, was a well-known hunter of Hunter's Hollow and had resided at Moore's Station at the Fish Pools (**Figure 24**). Isaac Hornbeck and James Standiford owned land near Newtown's location. Standiford's land was just north of Big Island where Standiford Field is now located.

Figure 24. Moore's Fishpools Estate.

The area had seen a significant increase in residents as a result of Brook's saltworks at Mann's Lick, which began in 1787. The population at this time included a number of African American slaves as well as white workers. Boundaries of Newtown were centered a little northeast of the present Fairdale from Wilson Creek on the west to South Park Hills on the east and from Fairdale Road northward (Nelson n.d.a).

In 1800, a salt deposit was built near Newtown, and salt was stockpiled. In a deliberate action in 1802, salt production was simultaneously halted at Mann's Lick and Bullitt's Lick (originally controlled by Moore's relative, Moses Moore) (McDowell 1956:42-43). This shot salt prices from $1 to $2 to almost $4 a bushel. Both Moores, William Pope, and Alexander Bullitt became very wealthy from artificially inflating the price of salt. All of these men contributed to the operation of Moore's Mann's Lick extensive salt-making operation near Newtown, either as workers or overseers. Speed contributed the use of his slaves and they had temporary residence in cabins

constructed in Newtown. It was the Newtown establishment that Harry Toulmin had visited and interviewed Moore in 1794; here he found 720 salt kettles operating all day, seven days a week (Toulmin 106).

By the 1830's new and tremendous quantities of salt had been discovered elsewhere, and salt production virtually ceased in Kentucky. By the 1900s, Newtown had been totally forgotten. When this town dissolved in the 1890s due to changes in Kentucky incorporation laws, other towns arose, including Mt. Holly, Coral Ridge, and South Park (Kleber 2001:280). The 1879 Beers and Lanagan atlas does not depict Newtown, suggesting the town may have been subsumed by or renamed Old Deposit Station years before 1890.

Penile. The community of Penile (pronounced paNILE, not PEE-Nile) is located along Blevins Gap Road, Greyling Drive, and Penile Road. The origin of the name has been the subject of debate, with no satisfactory conclusions. "Penile" is a Latin word meaning "tail." In Old German, it meant "small or baby animals." While there are actually individuals listed in the census whose names are spelled "Penile", this is likely a corruption of the surname "Pennell." The clue may be in the pronunciation. The residents pronounce the name as paNILE, not PEE-Nile. "Pennell" is pronounced "paNELL." In 1870, there were Panells living in the Woods district of Jefferson County. Later, the variations of Penel, Pennell, etc. appear in the census records. The name of the community may be named for this family. The name is interesting, as well, because a penal farm was once considered a possible use of the forest. In addition, the name appears to have some meaning in the Baptist church, as there are Penile Baptist Churches from Chicago, Illinois to Blue Springs, Alabama. Perhaps it is a derivation of peniel, which means "I have seen a divine being face to face, yet my life is preserved" (Wikipedia 2008). Today, the community consists primarily of the Penile Baptist Church. Although there are reports of a Penile Cemetery, this has not been confirmed.

Pitts Point. Now located on the Fort Knox Army reservation, this community was founded in 1831 by James G. Pitt and his brother John S. First incorporated in 1850, the village was called Pitts Point rather than Pittstown as the brothers had originally called it. In 1861, the village was again incorporated as Pitts Point. The post office closed in 1907. Not much remains of the town but scattered foundation stones (Rennick 1984:237).

Salina. An 1867 map shows a community called Salina located on the old Salt River Road that led from the mouth of Salt River at the Ohio River 21 miles northward to the Portland and Shippingport communities (**Figure 25**). This was apparently located on the west side of what is now the JMF near what is now the Pleasure Ridge Park area.

The 1843 and 1854 Gazetteers have Salina listed as a "post village" 65 miles west of Lexington (**Figure 26**). Nothing more about this small town was mentioned in either. The 1850 Phelps Traveller's Guide revealed that Salina was listed as the first stop outside of Louisville on the Louisville-Nashville stagecoach route (10 miles from the Galt house where the stage set out). This would have been about where Pleasure Ridge Park (PRP) is presently located—about ten miles from downtown Louisville. There was once a stage coach stop and tollgate in the PRP area known as the Nine-Mile House (*Courier-Journal* 1989:90-91).

The description of the stage details (page 91) match the highlighted section about the stagecoach service in the Samuel Beale Thomas bio below. The Hough, Carter and Thomas Stage Co. and Mail Service ran from 1830-1860. As stated in the bio, the coach line became

obsolete once the L&N RR was finished in 1860. Salina died as well. PRP was not named until about 1889. The 1867 map may be the last dated reference for the town of Salina.

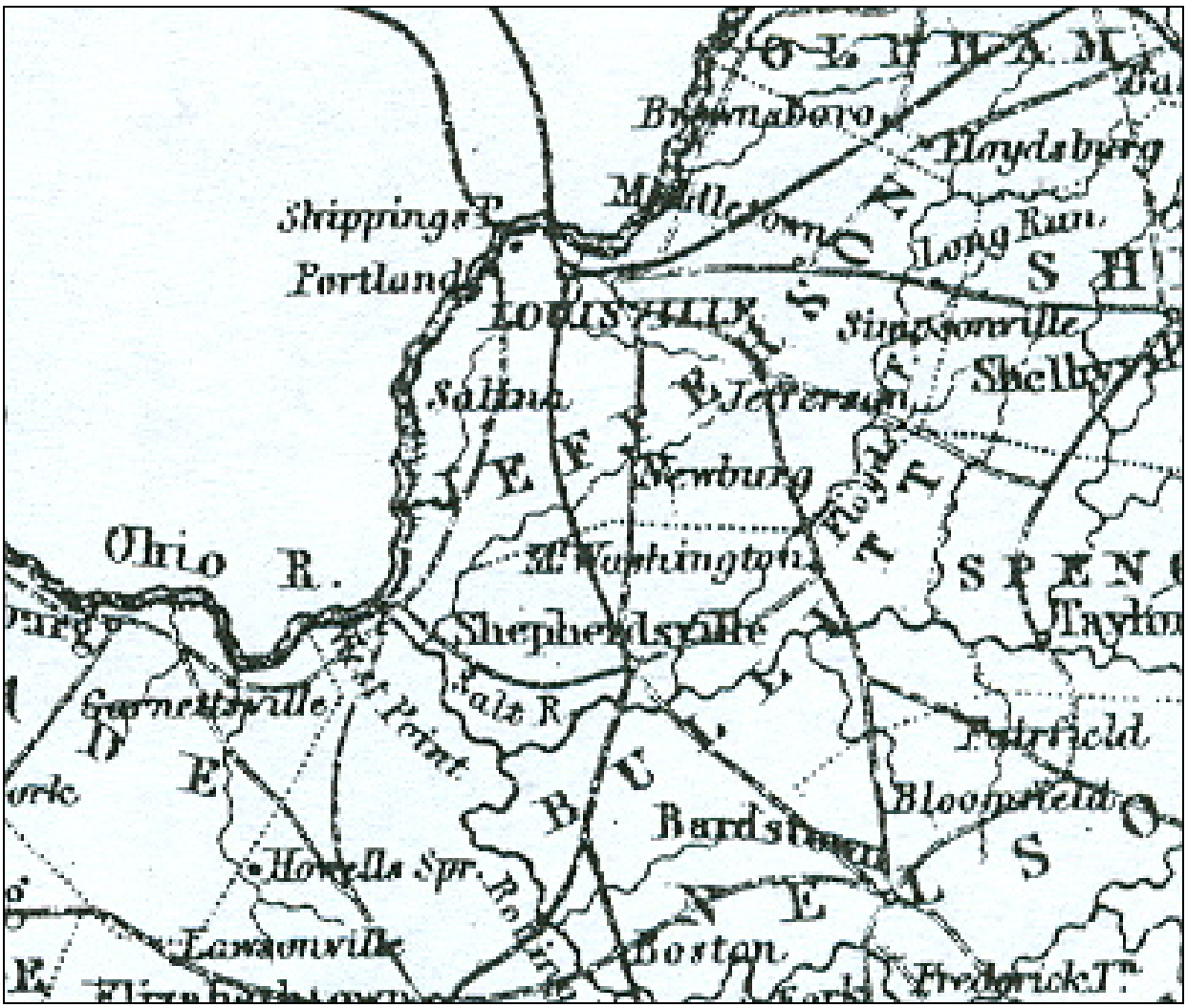
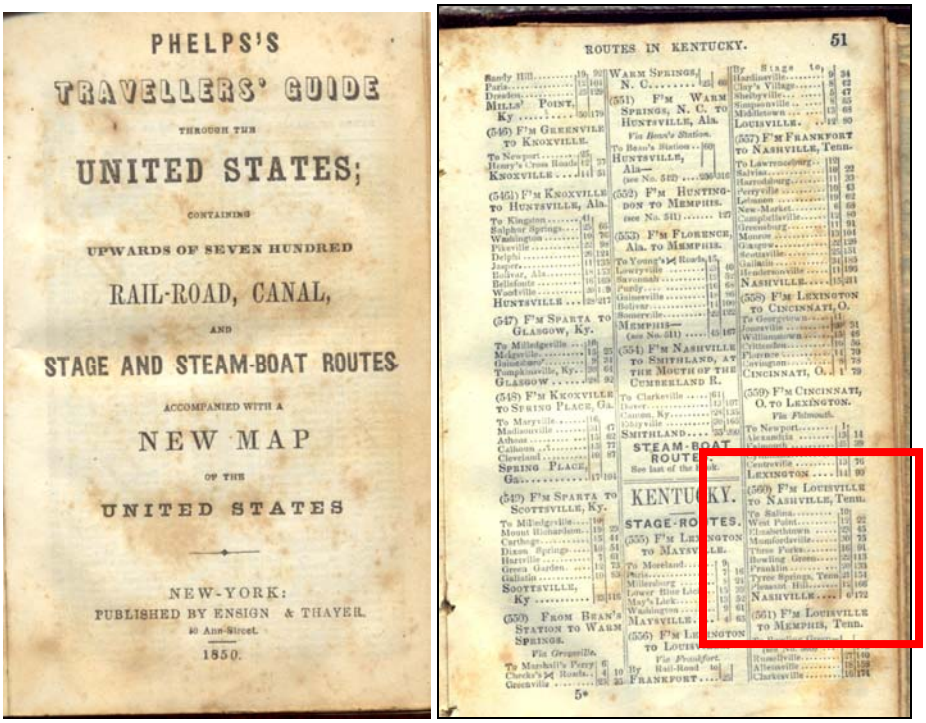


Figure 25. 1867 Map showing community of Salina along the Old Salt River Road.


PHELPS'S
TRAVELLERS' GUIDE
THROUGH THE
UNITED STATES;
CONTAINING
UPWARDS OF SEVEN HUNDRED
RAIL-ROAD, CANAL,
AND
STAGE AND STEAM-BOAT ROUTES
ACCOMPANIED WITH A
NEW MAP
OF THE
UNITED STATES
NEW-YORK:
PUBLISHED BY ENSIGN & THAYER.
80 Ann-Street.
1850.

ROUTES IN KENTUCKY. 51

KENTUCKY.
STAGE-ROUTES.
(555) F'M LEXINGTON TO MAYSVILLE.

To Moreland	9	
Paris	7	16
Millersburg	8	24
Lower Blue Lick	15	39
May's Lick	13	52
Washington	9	61
MAYSVILLE	4	65

(556) F'M LEXINGTON TO LOUISVILLE.
Via Frankfort.

By Rail-Road to FRANKFORT	25	

(560) F'M LOUISVILLE TO NASHVILLE, Tenn.

To Salina	10	
West Point	12	22
Elizabethtown	23	45
Mumfordsville	30	75
Three Forks	16	91
Bowling Green	22	113
Franklin	20	133
Tyree Springs, Tenn	21	154
Pleasant Hill	12	166
NASHVILLE	6	172

(561) F'M LOUISVILLE TO MEMPHIS, Tenn.

To Bowling Green—(see No. 560)		113
Russellville	27	140
Allensville	18	158
Clarkesville	16	174

Figure 26. 1850 Traveler's guide to stage and steamboat routes listing Salina, Kentucky.

There are old newspapers from areas including Montana and Missouri who list people as being born in Salina, Ky.

> *From "Who Was Who in Hardin County" compiled and prepared by Hardin County Historical Society. Copyright 1946.*
>
> *Samuel Beale Thomas was born August 4, 1811, in Montgomery county, near Cumberland, Maryland. He was the seventh child of Samuel and Mary Howard Thomas. He received only a limited education, and started out at an early age to make his way in the world. His first position was with Edward P. Johnson, who owned a line of stagecoaches which carried the mails also. He was first clerk, then general road agent over all the mail routes. About 1830 he and others bought out Mr. Johnson and the firm became Hough, Carter and Thomas, and this firm continued until the completion of the Louisville & Nashville Railroad in 1860, this doing away with their great stage and mail route. The stage company had its offices at the old Galt House--daily a stage ran each way from Louisville and Nashville and the company did a thriving business. To quote from the Register of the Kentucky Historical Society: "The coach used was the Concord type and carried six passengers inside with room for another on the box with the driver. For many years four horses were used in good weather and six in bad weather.*
>
> *The stage left Louisville at five o'clock in the morning, stopped for breakfast at the nine-mile house at Pleasure Ridge Park, and reached Elizabethtown at noon where passengers at dinner at the Eagle House. Resuming the journey at one o'clock the stage reached Bell's Tavern, now Glasgow Junction, 90 miles from Louisville, at nine o'clock p. m. and there spent the night. On the second day the stage left Bell's Tavern at five a.m. and reached Nashville at nine p.m., thus making the trip of 180 miles in two days. In 1834 the fare from Louisville to Nashville was twelve dollars." Whenever a noted personage traveled on the stagecoach, Mr. Thomas accompanied them, to see that every possible courtesy was shown them; as was the case when Jenny Lind made her tour---she spent sometime in Elizabethtown and is said to have sung from the steps in front of the Hill House, now the Brown-Pusey House. The company had a vast array of employees constantly engaged and at one time as many as 1,600 horses in daily use in the work of transportation.*
>
> *He [Beale] was a most successful business man and amassed a large fortune---he located first in West Point, Ky., which at that time was a business rival of Louisville. To handle the river business great warehouses were established there and he accumulated a considerable fortune in this business also, which continued until the completion of the Louisville & Nashville Railroad in 1860. He served as director of this railroad and it was through his efforts that the Elizabethtown and Paducah Railroad was built and he was president of the road. It was through his influence when the charter was granted to the L & N that the clause, "All trains going north and all trains going south should stop at Elizabethtown," thus giving Elizabethtown splendid railroad accommodation all through the years.*

South Park. During the mid 1850s, the main line of the Louisville & Nashville (L & N) Railroad passed through the current area of South Park on its route to Nashville. A station was established there, and was named Old Deposit. Later, in 1857, a post office was established at the location. The post office was called simply Deposit. Dallas P. Farmer, a local storekeeper, served as the first postmaster. He was responsible for changing the name of the post office from Deposit to South Park around 1889. The 1895 map depicted in **Figure 27** shows the L & N station located at South Park. The post office was moved to Coral Ridge in 1927 (Rennick 1984:97).

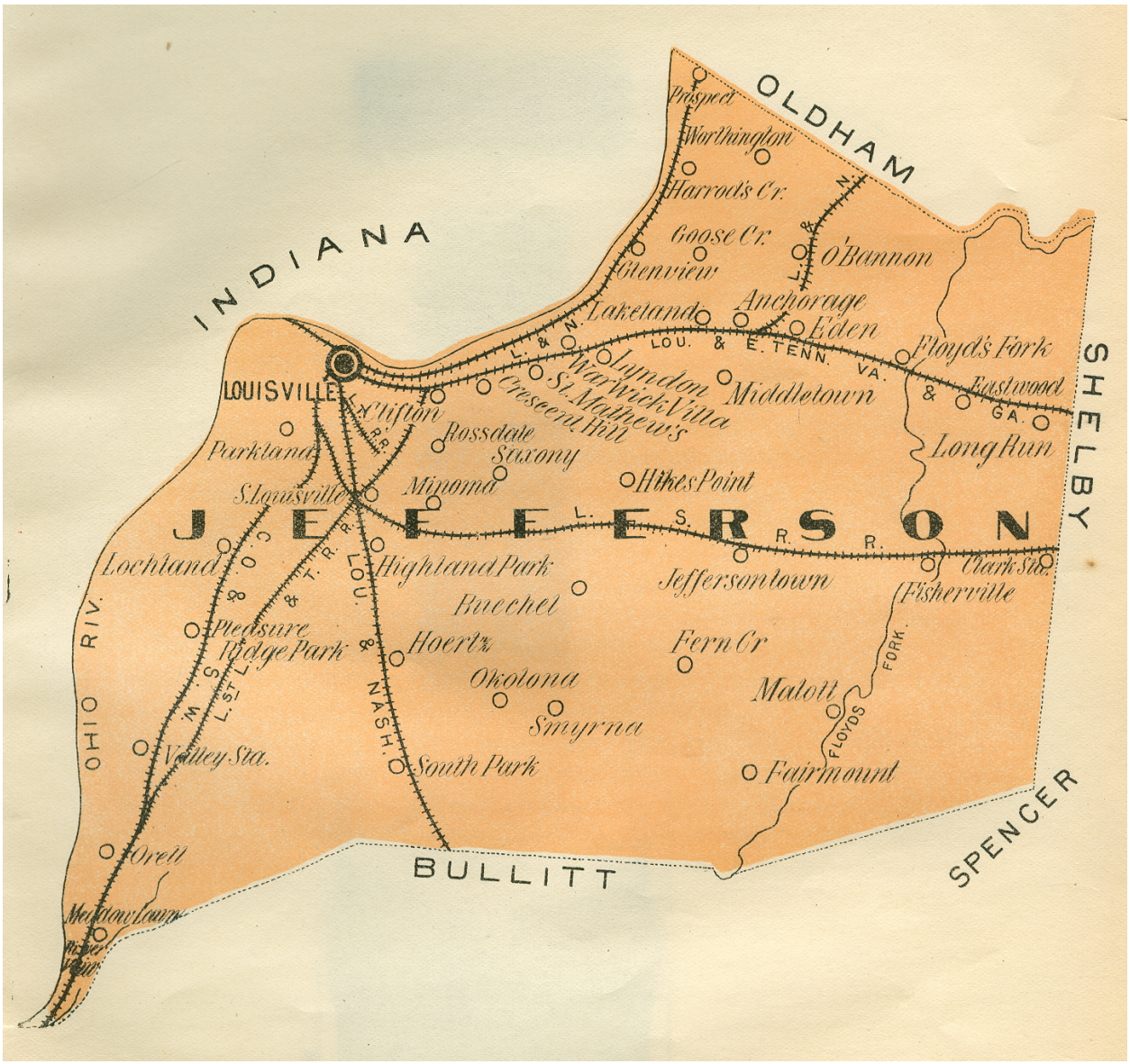


Figure 27. 1895 Railroad map showing location of South Park station.

South Park Country Club (SPCC). Like JMF, the South Park Country Club lies nestled within a series of knobs. The knobs underlying the SPCC, however, are isolated from those underlying JMF and are known as the South Park Hills. The history of the SPCC is likewise vastly different from the history of JMF. Begun as a private fishing club, the SPCC provides an

interesting counterpoint to the historic development of JMF. Whereas JMF had its bear camp, stories of rough times, and, since 1948, its public ground; SPCC had its clubhouse, stories of a more gentile nature, and private membership. Over the years, however, many Louisvillians have fond memories of trips to the hotel at SPCC. The hotel could be reached by railroad to South Park Station. An incline would then take guests up the rest of the way to the hotel. From its inception to the present, the organization provided a valuable resource and change of pace for Louisville executives and their families to escape their urban lifestyles. Today, the South Park Country Club fulfills an important function for area residents by providing employment opportunities as well as amenities for weddings, family reunions, and other events. Most of the information below was found in James Griffin's *100 Year History of South Park Country Club*.

The SPCC began in 1889 when the South Park Residence Company (SPRC) was formed with the singular goal of forming a new development between Fairdale and Okolona. The "why" is unclear, but the 25 members of the SPRC must have seen the hole in settlement patterns, recognized an opportunity, and accomplished it. One of the possible locations for this new settlement was near the former Old Deposit station, and by the next month the SPRC had purchased 30 ac from the Louisville Land Company. By the end of the year, the SPRC had prevailed upon L & N Railroad to build the new South Park depot to replace the Old Deposit station, agree to transport construction materials at reduced costs, and to dig the lake that became known as Silver Lake. It has been assumed that this arrangement included allowing the railroad to use the water from Silver Lake for their steam locomotives.

The development aimed to include a clubhouse, fishing lake, cottages, and a hotel—all of which were eventually accomplished. Originally, 116 cottage lots were envisioned. In light of the shallow soils and fragile ecology of the knobs region, all of the 116 lots were fortunately never built upon. Only 18 lots for summer cottages were laid out and only 17 were present in 2005. Only members of the club were allowed to build a cottage, and even then they could only lease the property.

The South Park Hotel Company was incorporated in 1890 and the South Park Fishing and Boating Club was begun in 1891. By the end of 1891, however, the business model changed and the assets of the SPRC, the hotel company, and the fishing/boating club were combined into the South Park Land Company. Development plans were stagnant through the turn of the century due to the Panic of 1893--a nationwide economic crisis caused by the inflation of credit that resulted in the failure of banks and companies throughout the country.

In 1905, another fishing club was formed that became known as the South Park Fishing Club (SPFC). The SPFC was incorporated and purchased 103 ac, including Silver Lake. The property eventually expanded to 300 ac and included the cottages on the hill, the original clubhouse (1906-1978), the second clubhouse (1930 to present), dining hall and ballroom, recreation hall, windmill, beach area, bathhouse, and an orchard. In addition to the early difficult economic time of 1893, other difficult financial times also corresponded to national economic woes, including 1922, the early 1930's, and during WW I and WW II. In 1937, possibly due to Depression-era financial troubles, the facilities were used by E. G. Dick in his "Keely Cure" alcoholism program (Nelson n.d.b).

The South Park Fishing Club transitioned to the South Park Country Club in 1962. Today, membership of voting members, termed Corporate Membership, is still held at the 100-member limit previously set for the South Park Fishing Club; another 600 non-voting membership spots

are also offered. The organization is incorporated as a non-profit and includes three lakes and 365 ac (Nelson n.d.). Golf as well as fishing is now an important activity at the club.

Valley Station. This unincorporated area that today consists of more than a dozen subdivisions lies along US 31W/60 (Dixie Highway) to the west of the JMF. A local post office was established there in 1874. William Kennedy served as the first postmaster. The community was named because a station was built there by the Elizabethtown & Paducah (Illinois Central Gulf) railroad in 1874 (Rennick 1984:302-303).

Place Names

Rennick (1984) points out the fact that names often suggest the existence of extinct geographic or cultural features. He says that names are an enduring legacy to the early settlers of an area or to people and events a community wishes to commemorate. They often outlive the existence of the places and people after whom they were named, and sometimes continue long after the reason for their naming has been long lost. Important to this project, he suggests that names of an extinct community may be perpetuated in the current name of a road that used to lead there. Genealogists have learned that place names can assist in finding the former residences of people who once lived there (Rennick 1984:x). Robert L. Ramsay once said that history teachers could recover much of a state's recorded and unrecorded history by studying place names if all textbooks and documentation were lost (Rennick 1984:x).

Many of the towns and villages in the area, as everywhere, have changed names over time. Most places had a common name that was often associated with a local landowner or establishment. Other more formal names were associated with the establishment of a U.S. Post Office. As discussed by Rennick (1984), place names can reveal a great deal to historians, linguists, geographers, folklorists, genealogists and other interested in the people who discovered and settled an area (Rennick 1984:ix). The rational for the assignment of names can be even more interesting. They can:

- Record the events that led to the settlement of an area
- The establishment of basin institutions of its people
- Reflect the cultural and intellectual development of a people (Rennick 1984:x).

The following discussion focuses on the origins of some of the place names evident in the JMF area. It also presents some information on less formal terminologies used by local residents and passed along by word of mouth.

Keys Ferry Road

Keys Ferry Road runs along the northern border of the Forest, currently terminating at Mitchell Hill Road. The name implies a ferry was once in operation in the area. In fact, several ferries operated along the Salt River. Merchandise was transported down the Salt River to its mouth at the Ohio River, and then upriver to the Portland and Shippingport communities at the Falls of the Ohio. This was considered often to be faster and easier than overland transport along the Old Salt River Road that ran 21 miles from the mouth of Salt River to the Portland area (**Figure 28**). Goods were also shipped from the steamboat port of Pittstown (Pitts Point) located at the mouth of the Rolling Fork River at the Salt River seven miles southwest of Shepherdsville in Bullitt County. Shepherdsville in Bullitt County was the nearest trading post to the facilities at the mouth of the Salt River that lay directly across the Ohio River to landings in Harrison County in

southern Indiana. Commodities shipped included flour, tea, gunpowder, as well as timber and salt.

Figure 28. 1839 map showing 21 miles stretch of the Old Salt River Road.

Several somewhat conflicting accounts regarding Keys Ferry have been identified in the literature. According to one account, Samuel Goldsmith, an entrepreneur river trader who came with his family to the Bullitt County area in 1814, applied for a license to operate a ferry across the Salt River. This was granted in 1838.

> *A list of rates for the Goldsmith Ferry across Salt River is as follows. Four wheel wagons with six horses was one dollar, for wheel wagons with two horses was fifty cents. Carts and other two wheel vehicles with two horses or oxen was fifty cents. Carts or carriages with one horse was thirty-seven and a half cents. Samuel charged twelve and a half cents for a man and his horse to ride the ferry. A single person cost six and a quarter cents. He charged three cents for each head of cattle and two cents for each head of sheep. Samuels ferry boat was forty feet long and ten feet wide (Goldsmith Family of Bullitt County, Kentucky*

(http://ftp.rootsweb.com/pub/usgenweb/ky/bullitt/misc/g432001/txt).

It is said that this ferry came to be known in ***later years*** as Keys Ferry. Based on Bullitt County records, it is known that the ferry was named Keys as early as 1856. The U.S. Census indicates that several individuals (families?) named Key lived in Bullitt County (born in 1799) in the area of the JMF. One record indicates that Thomas Davis sold 100 acres on Salt River to Thomas Key, married to Martha V. (Davis) as early as 1819. Key is reported to have arrived in Jefferson County from Lincoln County at least by 1796 (www.rootsweb.com/~kybullit/bcqnk.htm). Thomas had a son, George L. Key. The 1823 tax list for Bullitt County shows George owning 100 acres of land on the Salt River. By 1845, Key owned 116 acres on the Salt River.

From *Key and Allied Families by Janie and Julian Lane, J. W. Burke*, 1931, page 93, the following information from a direct descendant of Thomas Key can be found:

THOMAS KEY

Thomas came to Kentucky in 1782, settled on Salt River 20 miles S.W. of Louisville, opened a Ferry for travelers on the highway to New Orleans, La. Had one son George, who maintained the Ferry until 1867, when he died leaving two sons and one daughter, John T., Green L., and Minerva. John went to Missouri, had several sons and daughters. Minerva had no issue. Green L., had five sons and three daughters, Cordelia, Roxanner, Amaridaville Corbin M., Marcus L., John T., Clarence E., and George W., Corbin M., had three sons and two daughters, Alvin E., who is now in Los Angeles, Cal.; Raymond L., and Robert C., who are located in Louisville, Ky. Marcus L., had five sons and six daughters. The rest of the Key generation had no issue.

Yours truly,

1223 S. 4th Ave., Louisville, Ky. Corbin M. Key.

This would seem to indicate that the ferry known as Keys Ferry operated ***earlier***, and possibly coeval with, the Goldsmith Ferry, suggesting two separate ferries operating along the Salt River.

Black Jack Tavern

This was the name given to a “notorious establishment” in the Wet Woods just west of Fairdale (see **Figure 15** above). This was a local rendezvous and many stories are told about it. Many taverns in England and Colonial America were named “Black Jack.” A jack was a leather pitcher, bottle, or metal-lined leather mug designed to hold beer. The name is thought to derive from the *Jack,* a horseman’s defensive upper garment. The black jack is a smaller version of the jack, and it came in various sizes (Timbs et al. 1859:41). Black jacks were often decorated with small bells “to ring peales of drunkenness” (Larwood et al. 1908:384-386). The black jack was often featured on tavern signs.

Perhaps not coincidentally, there is both a tree and a weed found in wet, marshy areas that are called “black jack.” The naming of the tavern in the Wet Woods area may have had double meaning.

Rainbow Park

The Paul Yost section of the JMF was originally named Forest View Park. Forest View Park was a component of the Jefferson County Playground and Recreation Board's *Rainbow Chain of Parks (Fairdale Citizen June 10, 1965)*. During the 1950s, Charlie Vettiner envisioned a series of parks in the rural areas surrounding the Louisville metro area to complement the more urban Olmsted park system. The system of parks was designated the Rainbow Chain of Parks because of the colorful atmosphere developed for their infrastructure.

> *Replacing the old drab green picnic tables will be the modernistic red, white, and blue table tops with [unreadable] or orange and green (*Jeffersonian 1959).

Chenoweth Park in the southeastern portion of the county was the first park of this system. Forest View Park was among the early component parks of the chain.

It is reported that local residents also referred to the area as *Hippie Heaven* due to the large numbers of kids who utilized the area during the 1960s and 1970s.

Snawder Lane

In the mid-twentieth century, this was known locally as "Hungry Hollow" due the presence of small, cheaply made house occupied by families of low income. These residences were set back from the main road, and the only access to them was by walking.

Mitchell Hill Road

Mitchell Hill Road was dedicated in the early 1940s. The road was named for the father of Captain Dan Mitchell. Captain Dan died one day before the dedication ceremony was to occur. At the age of 99, Captain Dan had lived in the JMF his entire life, and is said to have been the last person to kill a deer in there. The road was rebuilt using resources from the Works Progress Administration (WPA). The rebuilt Mitchell Hill Road began at Fairdale and wound uphill for two and a half miles through scenic hills before joining Top Hill Road at the summit. Mitchell Hill Road runs along the highest portion of the ridge at an average elevation of about 800 feet.

Blevins Gap

The origin of the name Blevins Gap has not been definitively ascertained. The origin of the family name Blevins (var. sp. Blevens, Blevans, Blivens, etc.) traces back to an 11th century Welsh prince named Bleddyn ap Cynfyn (the double "d" in Welsh is the same as "v" in English). Bleddyn actually means "wolf cub" in English (Johnson County Historical and Genealogical Society 2001:64). This meaning seems so appropriate considering the longhunter occupations of the Blevins men who explored the Kentucky wilderness to trap game long before Daniel Boone came in 1775. The Moravian records of North Carolina report that in 1751, the elder Longhunter William Blevins and his sons were bringing in so many pelts to the trading posts, there was not enough cash available to pay them in full (Williams 2003:107).

The Blevins history in America begins with John Blevins, who arrived in Salem Massachusetts about 1659. Soon, Blevins families were spread to Rhode Island, Virginia, and North Carolina. Many Blevins families, along with several collateral families (Wallens and Coxes) moved westward to the frontier areas in the 1730s. In 1761, noted Longhunter Elisha Wallen (var. sp.

Walden, Walling, etc.), who was a brother-in-law to the elder Longhunter William Blevins (Withers 1895:60-61), formed a large hunting party that pushed into the Holston Valley of Tennessee, setting up a main camp near the Cumberland Gap (Belue 1996:98). Later, in 1763, Wallen's hunting party returned and moved into southeastern Kentucky and hunted as far as Crab Orchard. The men in these hunting parties were legendary hunters; Jack and William Blevins, Charles Cox, William Pittman, Henry Skaggs, and James Harrod, to name a few. The book *Seedtime on the Cumberland (Arnow and Wolf 1995:*145-147) tells of the hunting party that came into Kentucky before Daniel Boone, which included Cox (of Cox's Creek) and Blevins. The Blevins family was close friends to the Cox family.

In 1773, James Harrod went with Captain Thomas Bullitt to survey western portions of Kentucky (Belue 1996:100, 2003:77). As the surveyors moved from place to place, they named the rivers, creeks, and notable hills. It is possible that Harrod had influence over some of the names given to the landmarks, naming them for his hunter associates. However, it is much more likely that names had been given to the landmarks much earlier to denote the hunting territory of the longhunters. Wherever they went, they left a trail to follow like the tracks of the animals they pursued. For example there are numerous Wallen Ridges and Creeks in Virginia and North Carolina, named for Elisha Wallen; Pittman Creek on Cumberland River, named for William Pittman; Skaggs Creek in Rockcastle, Kentucky, named for Henry Skaggs (Arnow and Wolfe 1995:146). It is not improbable that Blevins Gap in the Jefferson Memorial Forest was named for the Blevins longhunters, who must have surely tromped into this part of the country.

There are numerous references to men named Blevins in Kentucky in 1800, notably in Lincoln, Pulaski, Cumberland, Green, and Logan counties. The 1820 census for Jefferson County indicates four Blevins males between 26 and 45 years of age; these were named John, Lemuel, James, and Samuel. These were likely brothers, and may have come to the area from Lincoln County. James Blevins married Polly Fox in Jefferson County on December 28, 1815. In 1824, he bought property in Bullitt County, near Mt. Washington. He died sometime between 1830 and 1831. James and Lemuel fought in the War of 1812 (Personal communication, Mr. Richard Somer, 2008). An older Samuel (born before 1775) may have been the father to these four. He appears on the 1820 census of Lincoln County where he was listed as older than 45. By 1814, a Samuel Blevins had moved to Jefferson County. Some members of the family appear to have eventually relocated to Oldham County. Considerable speculation exists regarding the lineage of Samuel, but it is postulated that he was descended from another James Blevins of Virginia. The elder James was a member of Captain William Herbert's militia unit that saw action in the Holston and Clinch rivers area and who participated in Lord Dunmore's War (http://donnneal.com/blevins-taylor.html). If this is the case, then there is a real possibility that the Blevins of Jefferson and Bullitt counties were related to the Longhunters by the same name. Blevins Gap was likely named for this family at an early date.

Button Mold Knob

Buttonmold Knob is an isolated, 804-foot AMSL hill situated just south of the Jefferson-Bullitt County line and is contained within two kilometers of the southeastern limit of the JMF (**Figure 29**). It is certain that Buttonmold Knob served as a welcome beacon to the early frontiersman heading towards the protection of the Mann's Lick salt camps after a long overland journey in a wilderness fraught with constant danger. The sight of this solitary, almost circular knob (**Figure 30**) would signify the last short leg of the journey. To any soul traveling north from the Shepherdsville camps, the knob would have been seen as the proverbial "fork in the road"

landmark to denote the future Jefferson County's southern-most boundary of the fertile Hunter's Hollow to one side and the valuable Mann's Lick frontier salt industry on the other.

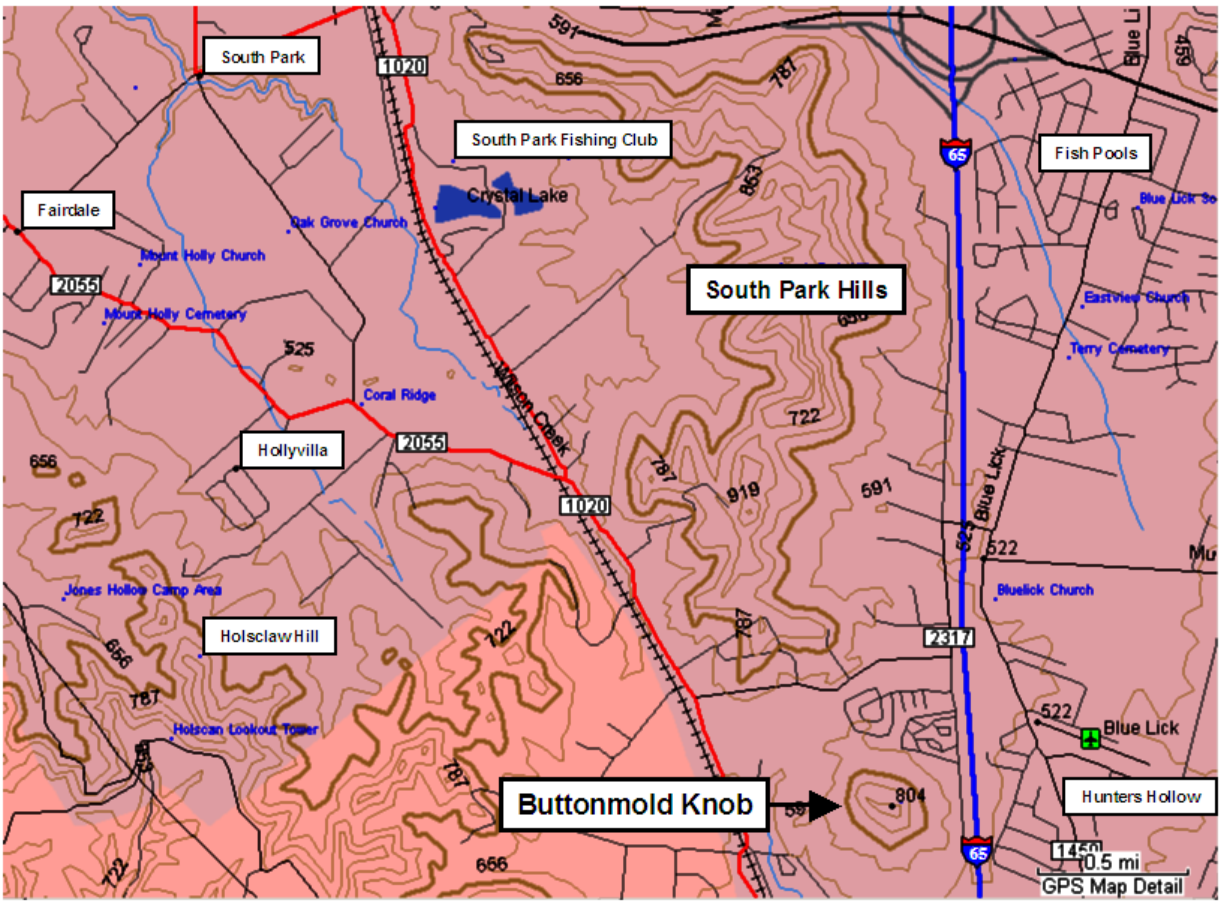


Figure 29. Buttonmold Knob Location Relative to JMF.

Geologically, the hill is largely composed of New Providence shale of the Borden Formation and sandstone sandwiched between a thin limestone-sandstone cap and a quality limestone base layer. A rich, fine-grained iron ore also abounds (Owen 1857:93-97). On the summit, there can be found a unique geological deposit, composed of profuse, diverse, and rare lower Carboniferous (Mississippian) Period fossils, including Echinoderms (crinoids, blastoids, sea cucumbers, and star fish), Brachiopods (lamp shells), Bryozoans, and Corals (**Figure 31**, **Figure 32**, and **Figure 33**) (Conkin 1957; Kammer 1984:115-130; Miller and Gurley 1884, Weller 1931:253-254). The circular, flat crinoid stem fossils found atop Buttonmold Knob contributed to its name derivation. The definition of *buttonmold* is a small, firm disc that is covered with cloth or leather to create a button.

These unusual fossils did not escape the notice of the early settlers. Even though paleontology as a science was in its infancy, knowledgeable men, such as Colonel James F. Moore, George Rogers Clark, and William Clark, intuitively felt the special importance of these ancient fossils. They ensured that specimens reached the hands of the most prestigious scientists of the day.

Figure 30. View of Buttonmold Knob.

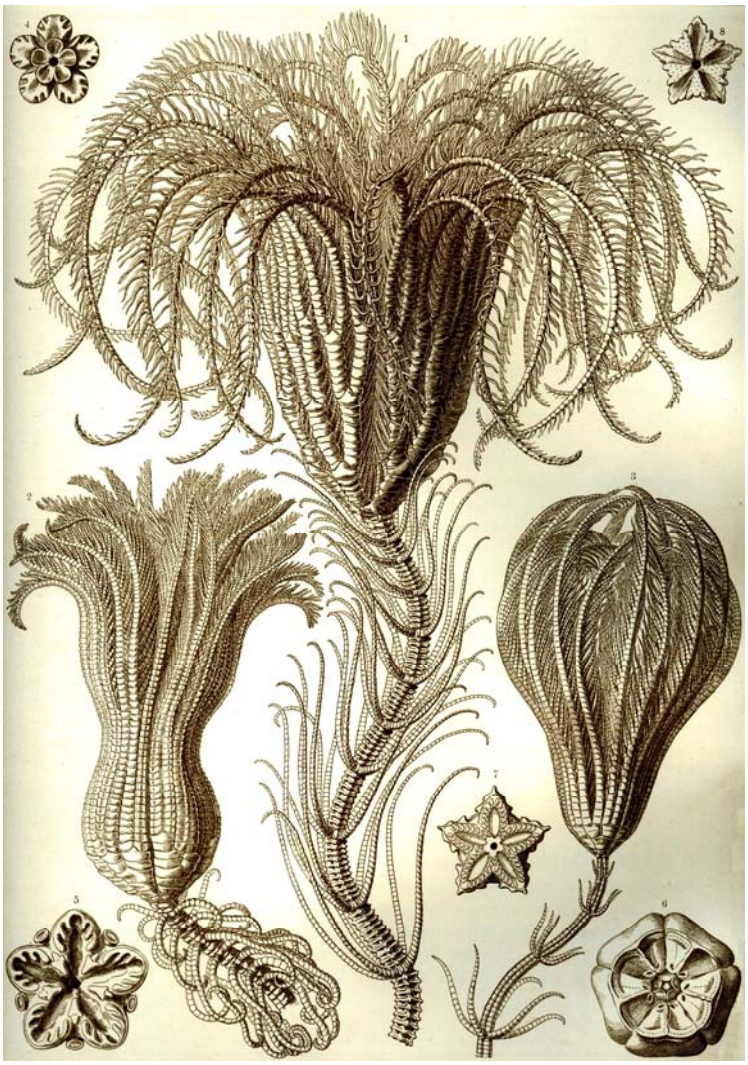


Figure 31. Crinoidea (Haeckel 1904:Plate 20).

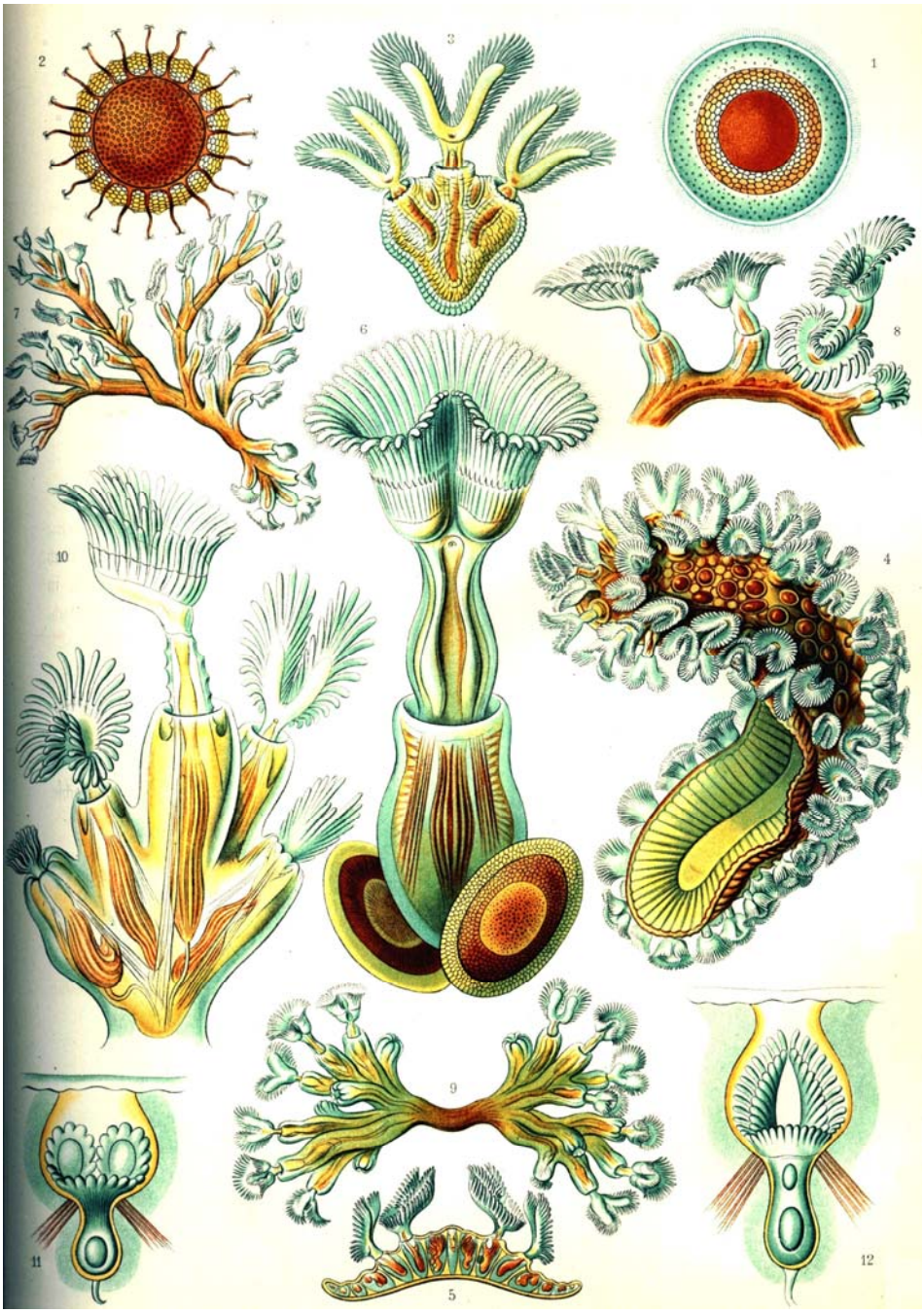


Figure 32. Bryozoa (Haeckel 1904:Plate 23).

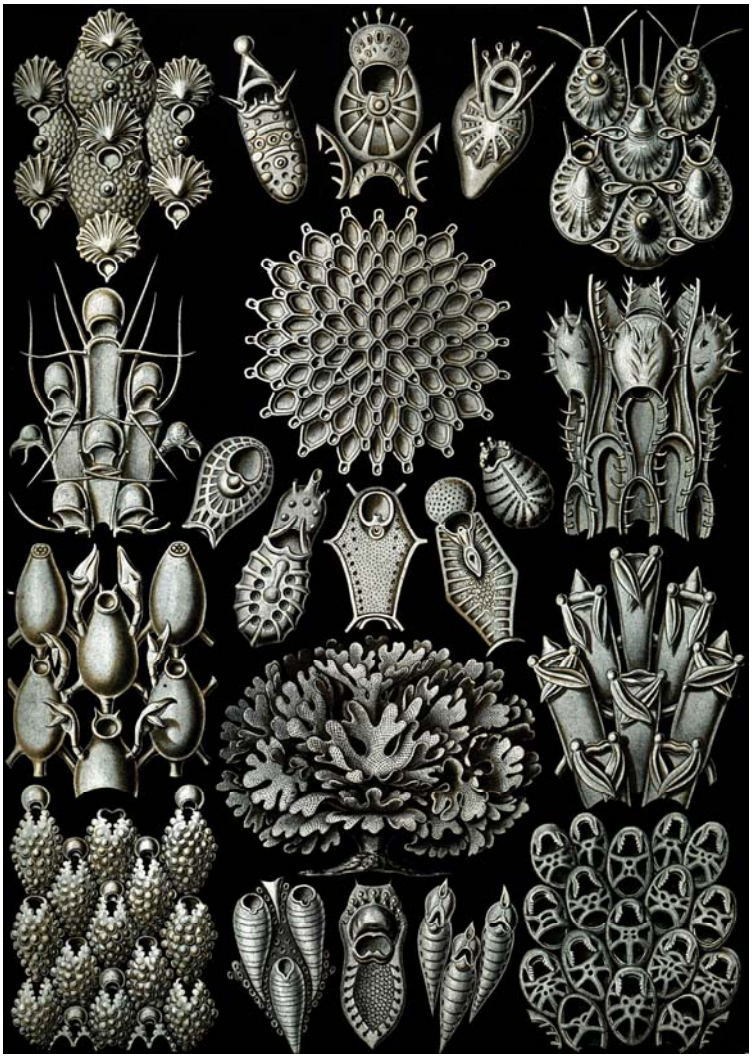


Figure 33. Blastoidea (Haeckel 1904:Plate 80).

From 1816-1820, the indefatigable naturalist and scientist, Constantine Samuel Rafinesque (**Figure 34**), along with John D. Clifford, his friend and business partner, collected and studied fossiliferous specimens from Buttonmold Knob. In 1820, Rafinesque published the first paper in America describing the late Paleozoic coral and other fauna found on the knob (Rafinesque and Clifford 1820; Sando 1977). His paper, written in French and published in Belgium, was circulated to the most inquiring minds of Europe's scientific community. Requests for specimens were fulfilled and Buttonmold Knob fossils could be studied in every major university and museum in Europe.

Figure 34. Constantine Rafinesque.

As the science of geology and paleontology developed, the interest in studying the fauna phylum Echinodermata (of which crinoids are members) greatly increased. It was found that this marine faunal group was extremely sensitive to even slight environmental variances. Studying crinoid species around the world and comparing adaptive morphological differences would help paleontologists understand the earth's climatic and geological changes spanning eons of time. Rare Echinoderm species with unusual evolutionary body structure adaptations kept Buttonmold Knob fossils in high demand (Ausich and Kammer 1987; Ausich et al. 1997; Yandell 1852:79-86). Fossils from this location can be found across America, in colleges and universities with Geology or Paleontology departments, and in museums, such as the Chicago Field Museum, Smithsonian, New York Museum of Natural History, American Philosophical Society Museum, and the Harvard College Museum of Comparative Zoology.

In 1846, Sir Charles Lyell (**Figure 35**), the "father" of modern geology and the mentor of Charles Darwin, made his second visit to America for the purpose of collecting additional fossils that would lend support to his evolutionary theories. On his itinerary was a trek to New Harmony, Indiana (the American scientific think tank of the day) to visit the geologists, in particular David Dale Owen. Owen had extensive geological specimens, including many from Buttonmold Knob. At his insistence, Lyell made a stop at the Falls of the Ohio to meet with distinguished fossil collectors, Dr. Asahel Clapp of New Albany, Indiana and Dr. Lundsford Yandell of the University of Louisville Medical School (Lyell 1846:277-280). Yandell escorted Lyell to the summit of

Buttonmold Knob to collect Echinoderm specimens for study. For over 200 years now, scientists have been collecting and studying these fossils of Buttonmold Knob and they are still finding new species with morphological attributes that challenge the world views on the environmental changes of the Paleozoic Period (Ausich et al. 1997; Ehlers and Kesling 1963).

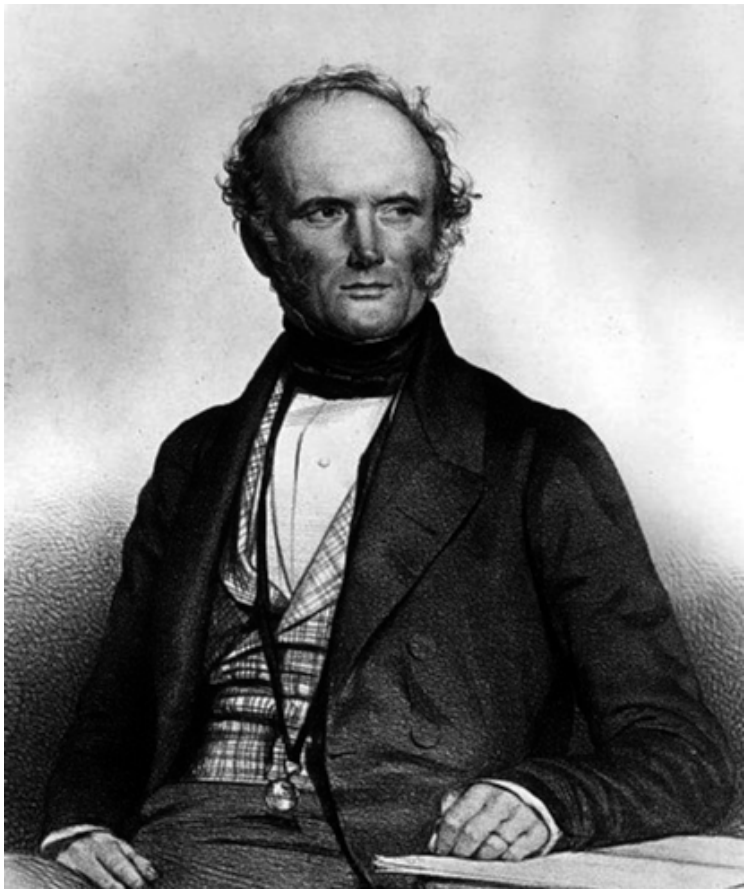


Figure 35. Sir Charles Lyell.

Buttonmold Knob's historical significance as the first Paleozoic fossil collection point west of the Appalachians (Thomas Kammer, personal communication June 2003) has been long forgotten. Even the current significance of the knob as one of the few places remaining in the world to obtain certain unique Paleozoic Echinoderms has been overlooked. Indeed, due to the worldwide interest shown by the most celebrated national and international scientists, Buttonmold Knob should be included in the State Registry and nominated as an International Historic Site, as well.

Besides the history associated with the ancient fauna of Buttonmold Knob, there are two other historical items worthy of note. One concerns a petroglyph on an exposed horizontal limestone slab on the west side of the summit, and the other involves local Native American tradition.

The petroglyph's surface is very eroded, but the outline of a boot and a profile of a person wearing an elaborate headdress are still recognizable (**Figure 36**). The antiquity of the petroglyph has not been determined, but there is an etched date of "177_" (the last digit cannot

be determined with certainty). Folkloric stories have circulated to explain the existence of this stone etching, the most romantic one being that the images represent a cryptic map describing the location of a pot of gold (Henson 1972:69,1985:48). One story goes that an early settler of the knob was saving to provide his betrothed with a proper dowry. He placed the gold in a hidden cave somewhere on the knob. The petroglyph map he created cryptically pointed the way to the cave where the stash was located. Before the man proposed, his love eloped with another suitor. The jilted man was so broken-hearted, he did not bother to recover his treasure, and the gold has never been found. Another story relates how Native Americans had hidden gold stolen during frontier raids in a Buttonmold Knob cave (Henson 1972:69).

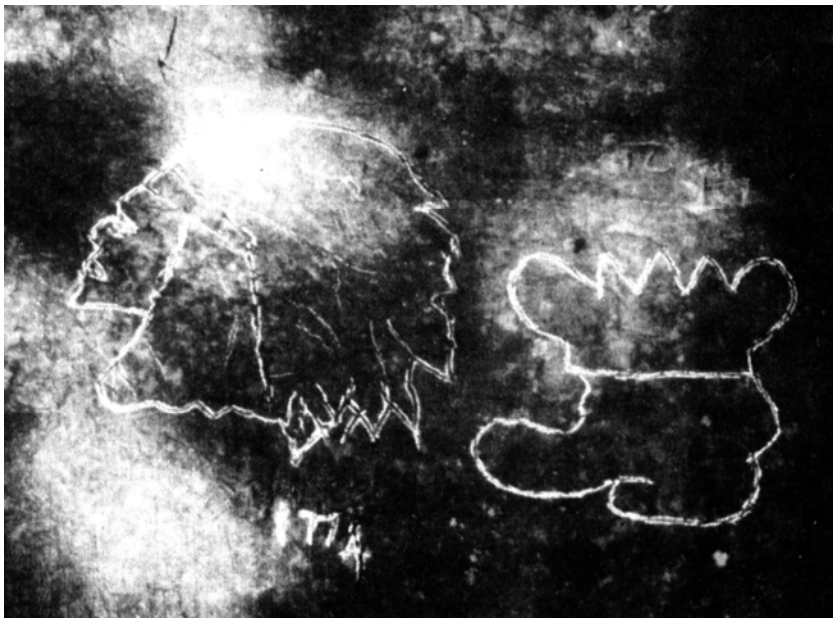


Figure 36. Petroglyph at Buttonmold Knob.

The other significant historical aspect of the site is its traditional importance to Native Americans in the area. Angie Watkins, the current landowner, allows a local Cherokee group to worship and perform sacred ceremonies on the summit of Buttonmold Knob, as they say their ancestors had done since time immemorial (Angie Watkins, personal communication June 21, 2003).

Families Who Lived in the JMF Vicinity

Settlement in the area began in the 1770s when Thomas Bullitt was given the task of surveying the area. Families that came to the area just after this time included German immigrants such as Schnatter (soon to be changed to Snawder) and Horine. Other families, such as the Caple family, migrated from an Eastern state such as Maryland or Pennsylvania (**Table 12**).

Table 12. Families Settling in the Area during the Eighteenth Century

Name	Year	Notes	Source
Joseph and Nancy Brooks	1779	from Pennsylvania	Rennick 1984; *Courier-Journal* 2008
Col. James F. Moore	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
James Speed	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
Abner and Lewis Fields	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
Basil Prather	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
Isaac Hornbeck	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
James Standiford	by 1779	associated with the establishment of Newtown	Gov. Isaac Shelby Correspondence-Enrolled Bills 1792-1794
John May	November 16, 1781	from Dinwiddie County, VA; owned 6,000+ acres, including intersection of Scotts Gap and Blevins Gap Road	HLPDC files; Kentucky Secretary of State 2008
Abraham and Elizabeth Field (parents of Joseph and Reubin)	1784	Culpepper, Virginia	Field and Field (2006)
Thomas Schnatter (Snawder)	1789	immigrated from Germany; in Kentucky by 1789	JMF Archives (n.d.c)
Jacob Horine	1798	immigrated from Germany; in Kentucky by 1783; in Bullitt County by 1798	JMF Archives (n.d.b)
Andrew Caple (1771-1843) Mary Lochry Lacy Caple (1769-184_)	By 1798	Married in Jefferson County, KY in 1798; Andrew migrated from Baltimore, MD and Mary migrated from PA	Victoria Caple Kaelin, personal communication 2008

Many families continued to arrive during the early half of the nineteenth century. Families arriving in the area during the earliest part of the nineteenth century include the Goldsmith family, who bought property along Knob Creek in Bullitt County in 1814, and Thomas Snawder (nèe Schnatter), who bought land from Nicholas Buckner along Brier Creek in 1817 (**Table 13**). From the data provided by cemetery records in and around JMF, however, the population in the area appears to have been most vibrant during the last half of the nineteenth century.

Table 13. Families Settling in the Area During the Nineteenth Century

Name	Year	Notes	Source
William Pope	by 1802	participated in salt monopoly in 1802	McDowell 1956
Alexander Bullitt	by 1802	participated in salt monopoly in 1802	McDowell 1956
John Goldsmith	1814	bought along Knob Creek in Bullitt County; located where Cupio would be formed	
Nicholas Buckner	by 1817	owned along Brier Creek	JMF Archives (n.d.c)
Thomas Snawder (nèe Schnatter)	1817	bought 311 ac along Brier Creek from Nicholas Buckner	JMF Archives (n.d.c)
John, Lemuel, James, and Samuel Blevins	by 1820	location within Jefferson County unidentified	1820 census
James Gherkin	by 1823	owned land donated for Mt. Holly school	JMF Archives (n.d.e)
John Farmer	by 1823	owned land donated for Mt. Holly school	JMF Archives (n.d.e)
James C. Pendleton	died 1835	buried in Pendleton Cemetery (C73d, Bullitt County)	HLPDC files
George Horine	1837	property at headwaters of Knob Creek	JMF Archives (n.d.b)

Early maps such as the 1858 G. T. Bergmann map identifies a number of landowners in the area, including Brown, Gardner, Estis, Lewis, Snawder, Stinson, Miller, Dunbar, Stone, Brewer, Barth, Barman, Davis, Mitchell, Arnold, Reisinger, Hahn, and Hays (**Figure 37**). Nineteenth century farms that are still in agricultural use include the Caple Farm located off of Jefferson Hill Road and the Lebold Farm (JF57), located along Bearcamp Road. Both are described in more detail below.

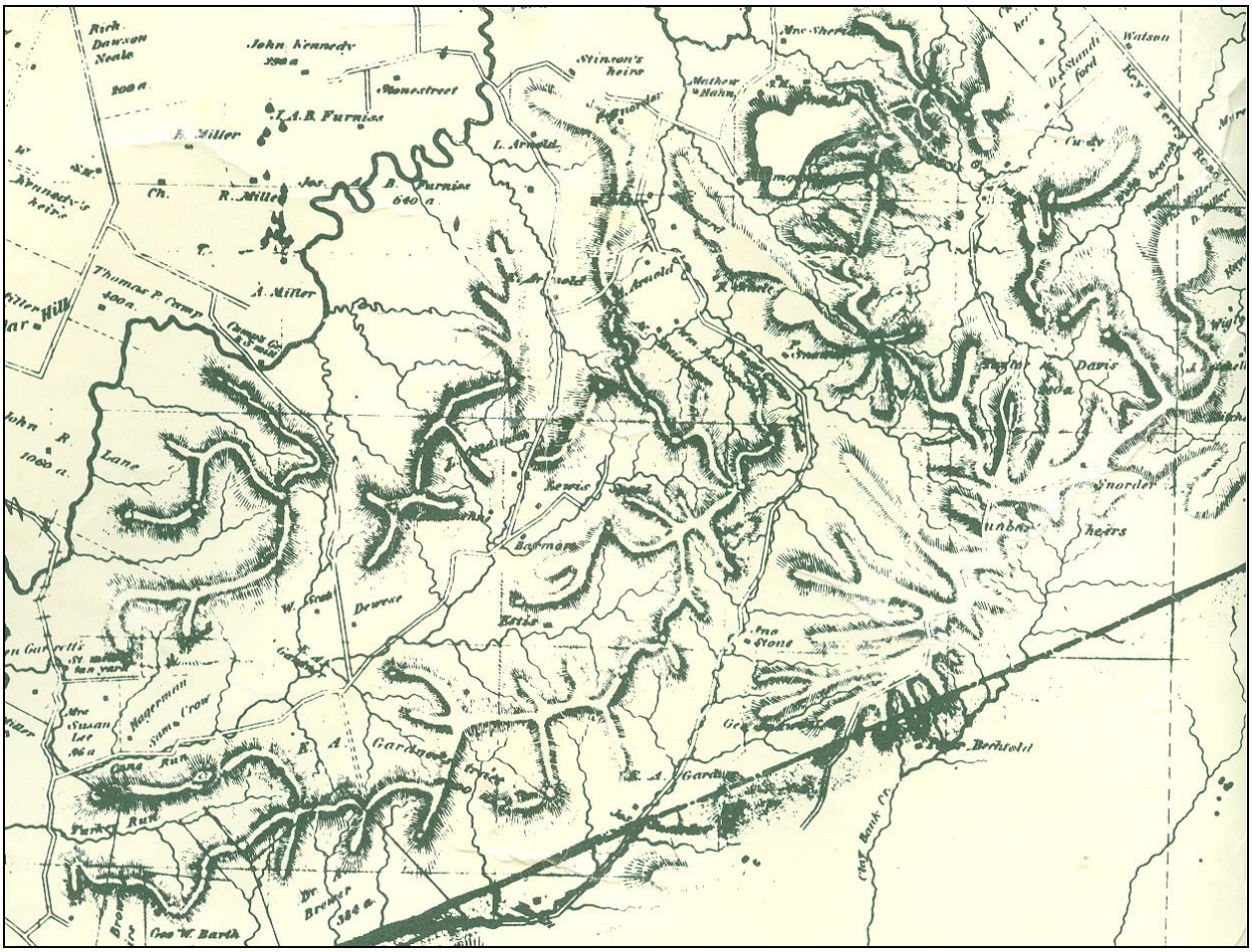


Figure 37. 1858 G. T. Bergmann Map.

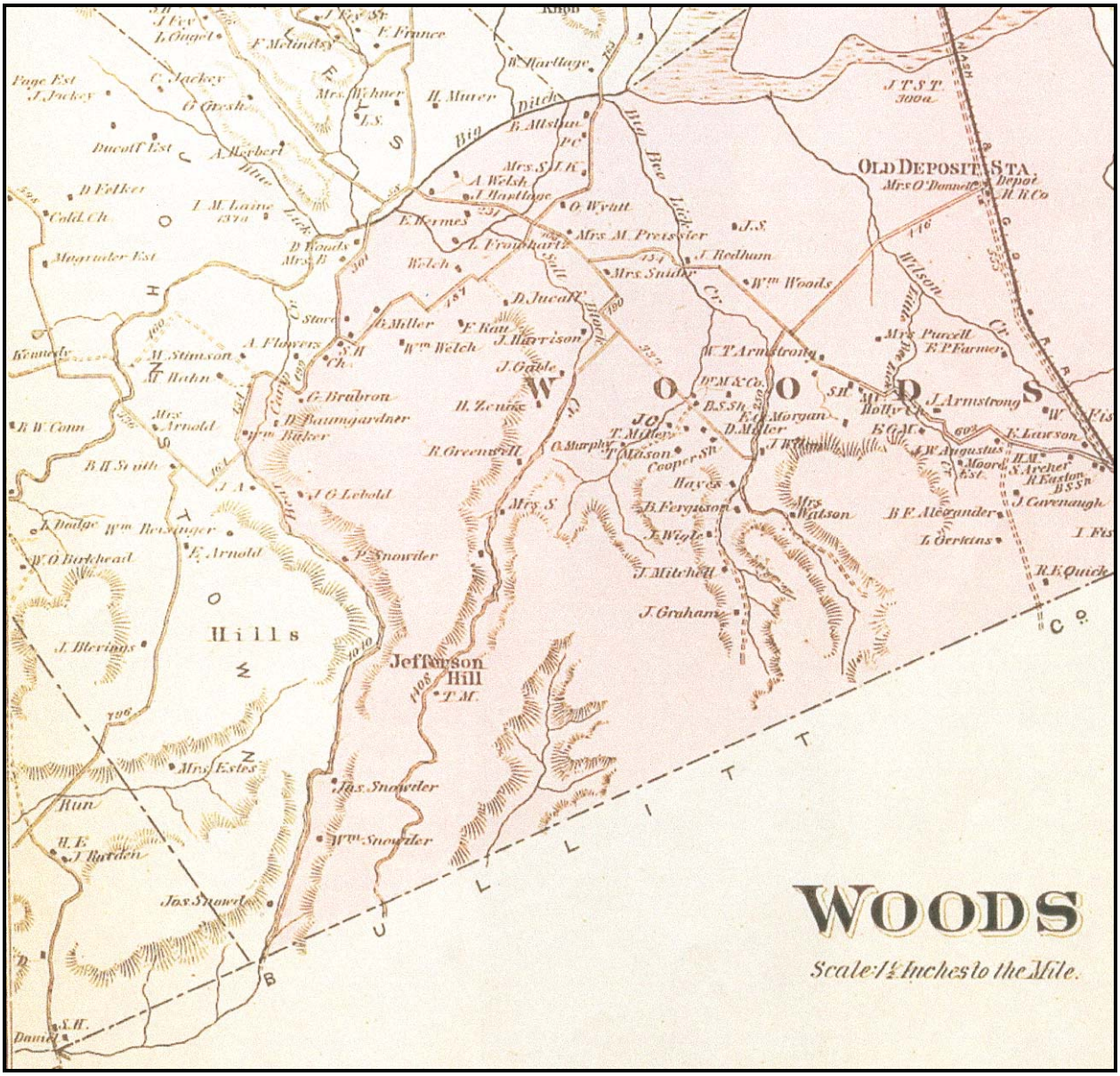


Figure 38. 1879 Beers & Lanagan map depicting the knobs.

The 1879 atlas documents a number of families within the area that became Jefferson Memorial Forest (Beers and Lanagan 1879) (**Figure 38**). At this time, the area was called the Woods. Families along the Cane Run drainage included Estes, Rarden (Rearden?), Scott, Dawess, Lee, and Blevins. Further south along the Brier Creek drainage lived the Brown, Hawking, Barth, Polly, McDaniel, and Snowder (Snawder?) families. Along Bear Camp Creek included Brabron, Baumgardner, Baker, Lebold, and Snowder (Snawder). Along Salt Block Creek families such as Miller, Pretssler, Snider, Jucaff, Welch, Ratt, Gable, Harrison, Zenike, and Greenwell settled. Along Big Bee Lick Creek were names such as Redham, Woods, Armstrong, Morgan, Miller, Mitchell, Graham, Ferguson, Wigle, Watson, Mason, and Murphy. The following provides more discussion on a few of these families.

Caple (var. Cable). The following genealogical information of the Caple family was shared by Mrs. Victoria Caple Kaelin. Additional information and use of photos came from Kristin Caple Shockley, co-owner of the Mt. Holly Video and Fun Zone.

The common Caple ancestors for many Caples in the area were Andrew and Mary Lochry Lacey Caple. Mary Lochry was born in 1768 and married to a Mr. Lacey prior to Andrew Caple. This marriage included two daughters. Andrew, born in Baltimore Maryland in 1771, was in Jefferson County, KY by February 7, 1798, as indicated on his marriage license to Mary. In 1808, Andrew bought land to farm, probably the Caple farm at 10300 Jefferson Hill Road. From this marriage came eight children: Samuel, Jeremiah, James, Mary, Catherine, Nelson, Nancy, and Albany. Andrew died in 1843, and Mary died around then as well. The Caple family cemetery is on this property.

After Andrew and Mary's deaths, the family farm on Jefferson Hill Road went to their son, Nelson Caple. Nelson had married Sarah Jane Potts, and their marriage included twelve children: Fielding, Mary Ellen, George, Squire, James Andrew, Benjamin Franklin, Sarah Jane, Catherine, Zachary Taylor, John Wesley, Perlina Ann, and Henry Clay. Following Nelson and Sarah Jane's tenure on the farm, the property went to their son, James Andrew. His children, Rals Nelson and Annie Caple Snawder acquired the farm but finally sold it in 1913 to the McKay family. In 1918, the property was sold to Luther Marcum.

Another son of Nelson and Sarah Jane Potts, Benjamin Franklin, married Martha Jane Graham. While married to Ben, Martha had nine children: Margaret Ann, William Henry, George Washington, John Wesley, Samuel Edward, Squire Andrew, Minnie Jane, Charles Lee, and Benjamin Franklin, Jr (**Figure 39**). Later, Martha Jane Graham Caple remarried to a Mr. Ferguson.

One of Ben and Martha's sons, Samuel Edward, married Maud Witt, who taught school at the Mitchell School (now Welcome Center). They are the great grandparents of Victoria Caple Kaelin. Their house was built in 1923 and stands at 501 Caple Avenue, near the intersection of Mt. Holly Road and Caple Avenue. She remembers much about the property, including many outbuildings such as a root cellar and barn. Additional Caple properties lie across from the Mt. Holly Cemetery, including 501, 601, 701, and 801.

Figure 39. The Ben Franklin and Martha Graham Caple family. Photo on display at the Mt. Holly Video and Fun Zone; courtesy of Kristen Caple Shocklev.

Figure 39 portrays the Ben Franklin and Martha Graham Caple family. Seated in the front row are Charles Lee, their mother Martha, and Margaret Ann Caple Donhuff. In the back row are Squire Andrew, Samuel Edward, John Wesley, George Washington, and William Henry. Missing from the photo were Minnie Jane Caple Mason and Ben Franklin, Jr.

Figure 40. Charles Lee and Ollie Caple family. Photo on display at the Mt. Holly Video and Fun Zone; courtesy of Kristen Caple Shockley.

Figure 40 portrays another generation of Caples. Seated in front row are George, Lloyd, Mary Catherine Caple Slack Gayhart, Perry, and Ollie. Standing in back are Minnie Caple Pennick, Elmer, Nellie Caple Gardner, Virginia C. Manley Roberts, and Herman. Photo was taken at the Caple Farm located off of Mt. Holly Road. The large log home had been sided over and had stood until a snowstorm a few years ago.

Field. Abraham (1744-1822) and Elizabeth (Betty) Field moved their family from Culpepper County, Virginia in 1784. He had difficulty finding work due to physical limitations incurred by a gunshot wound to the shoulder during Lord Dunmore's War (1773-1774). He held numerous jobs, including road surveyor and hunter (Field and Field 2006). In 1790, Abraham purchased a 200-acre farm in the Knobs region along Pond Creek. The farm was close to both Mann's and Bullitt's licks in Bullitt County. As early as 1802-03, their son Ezekial became involved in the salt making, and before long he bought a one-fifth share in Bullitts Lick. He came to be one of the prominent salt makers of the area. It is likely he involved his younger brothers in the salt-making industry. Two of his brothers, named Reubin and Joseph, joined Meriwether Lewis and William Clark's Corps of Discovery in October of 1803. The two were among the first three men selected for the expedition, possibly because they were said to have been skilled hunters and woodsmen. They were assigned the rank of Private in the Army (Field and Field 2006). Regarding their service during the long voyage, Captain Lewis had the following to say about Reubin and Joseph:

> *…two of the most active and enterprising young men who accompanied us. It was their peculiar fate to have been engaged in all the most dangerous and difficult scenes of the voyage, in which they uniformly acquitted themselves with much honor. (Yater 1992:2).*

The experience of the Field brothers in the salt industry proved to be important to the Lewis and Clark expedition. By December 1805, when the expedition reached the Pacific Ocean, the group was out of salt. The Captains authorized Joseph Field to establish a salt-making operation in order to replenish their supplies before heading home. Meriwether Lewis recorded in his journal that

> *The salt was excellent, fine, and strong, & white.*

The prior experience of the brothers in salt making enabled them to produce a quality product that involved more than simply boiling water until only the salt remained (Kramer, in Bader 2001:64). (See also Yater 1992:2-3).

Joseph and Reubin were discharged from service on October 10, 1806. They returned to Kentucky and Reubin married Mary Myrtle in 1808 in Indiana. The couple acquired land south of Louisville and took up farming. Reubin died in 1822. While the location of his gravesite is not known, it is speculated it may be in the Bethany Memorial Garden in Valley Station. Joseph died in 1807. The circumstances of his death remain unknown. His passing was noted on the cover of William Clark's journal; Clark believed Joseph had been killed. More recent speculation suggests that Joseph may have been killed in an attempt to return a Native American chief, Sheheke to his Mandan village. Sheheke had been persuaded to accompany Lewis and Clark to Washington D.C. to meet President Jefferson. It took several attempts and three years to return the chief to his home. During one attempt, the party was attacked by Arikara Indians, and several people were wounded and killed. It is possible that Joseph was among the casualties.

The Field brothers are commemorated with a historical marker located at the entrance to the Tom Wallace recreation area (**Figure 41**).

Figure 41. Historical marker at the entrance to Tom Wallace recreation area.

Holtzclaw. Holtzclaw (originally Holtzklau, var. Anglicized sp. Holtsclaw, Holsclaw, Holtzlaw, etc.). Hans Jacob Holtzclaw was born in Truppbach, Nassau-Siegen, Germany, near villages named Ober- and Nieder-Holzklau (Upper and Lower Holzklau) (Holtzclaw 1936:1-2). This area in Germany had been known long ago for its dense forests that took great effort to clear for agricultural purposes. It is possible that Jacob's ancestors helped clear the forests from this area, as the surname "Holtzklau" is a compound German word for "timber claw." In many cases, a family derived its surname from an occupation or trade; for example, the well-known origination of the English name "Smith." Perhaps "Holtzklau" refers to an ancient term for a timber cant-hook, used to grip and drag felled logs. The surname is old, because the ancient parish of Holtzklau was mentioned as early as 1069 in German records (Holtzclaw 1964).

Genealogical researchers have convincingly determined that all early American Holtzclaws can be traced to Jacob, born in 1683. He arrived in 1714 with his wife Margaret (Otterbach), oldest son John, and 11 other related families. These families settled on what would eventually become known as the original Germanna Colony in Orange County, Virginia (Memorial Foundation of the Germanna Colonies in Virginia, Inc. (MFGCV 2007). Governor Spotswood provided a fort with cannons and ammunition and, in return, the colonists would provide labor for establishing an ironworks. Though Jacob was a well-educated schoolmaster (as his father and his father before him), he and the families with him were also accomplished ironworkers, mechanics, and other tradesmen (Holtzclaw 1964).

By 1718, Jacob, John Fishback, and John Hoffman had become naturalized and made a land entry of 1800 acres in Virginia's Northern Neck (Spotsylvania County Deed Book A, page 165). Their entry was finally patented in 1724 and was known as Germantown (Fauquier County,

Virginia). Jacob was a prominent citizen of Germantown, becoming the schoolmaster and the reader for the German Reformed Church, for which he received 30 pounds of tobacco a year from each family in attendance. Jacob and the families who emigrated with him continued to make many important contributions to the Colonial historical period, too numerous to mention here. They have been duly credited for setting up the first iron furnace and establishing the first German Reformed Church in America (MFGCV 2007).

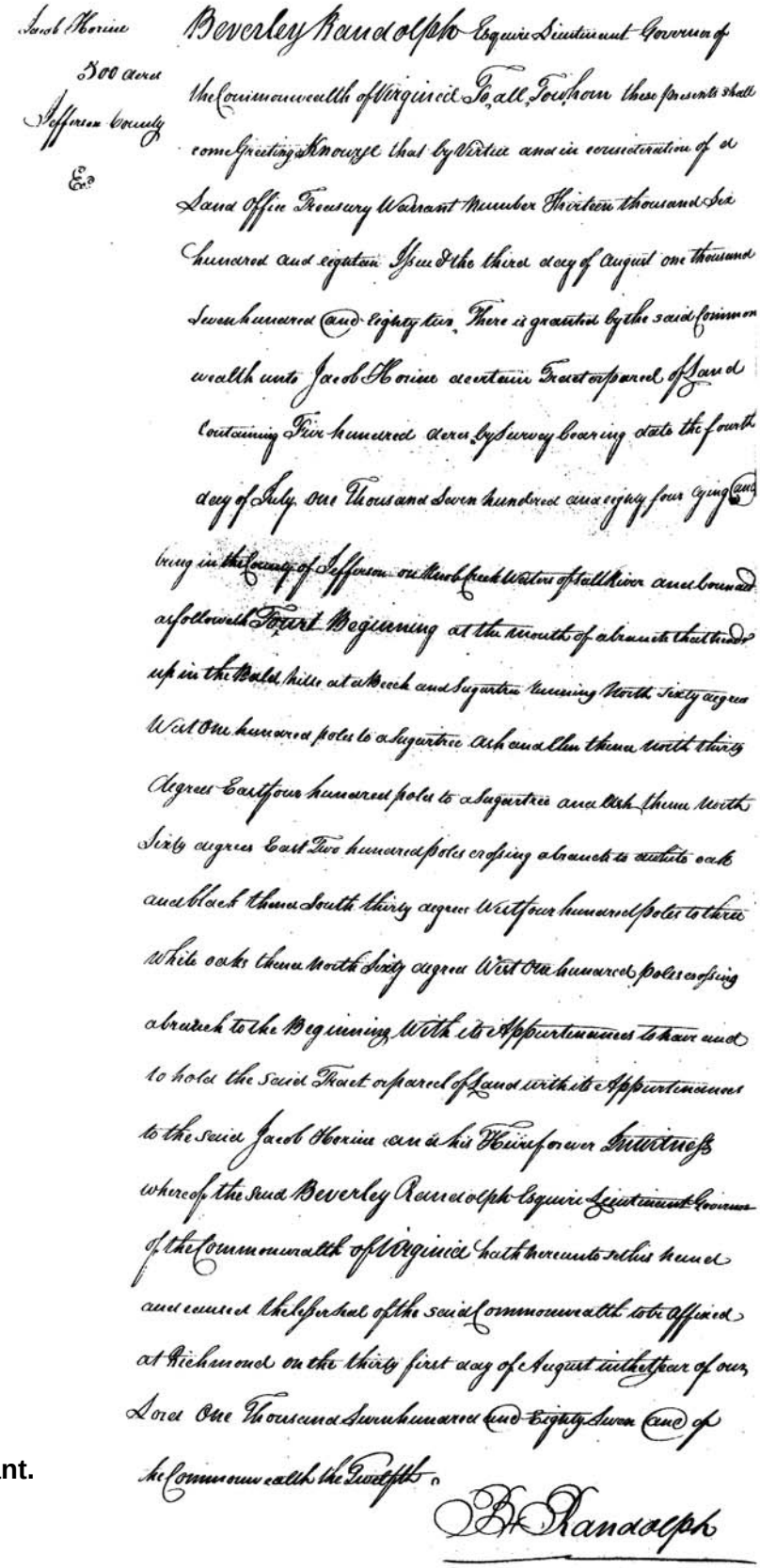
Jacob and Margaret had five sons, and all but one remained in Virginia throughout their lives. In 1775, Jacob, Jr., filled with wanderlust, sold his land in Virginia and headed for the Kentucky frontier. He settled in Mercer County. Many of the senior Jacob's grandsons moved to Kentucky previous to statehood: Benjamin settled in Gerrard County, Henry settled in Barren County, and Jacob and Joseph moved to Boone County. One grandson, James (son of Henry, b. circa 1743, d. 1838), married Elizabeth Osborne (daughter of Samuel Osborne) in 1797 in Nelson County. He soon moved to Bullitt County and settled on what became known as "Holtzclaw's Knob" (Holtzclaw 1936:42). James and Elizabeth had three sons and four daughters, and it was due to this family that the name Holzclaw became so prolific in Bullitt and Jefferson counties. It is interesting that the surname distribution maps between 1800 and 1870 (compiled from census records) showed that Kentucky had the highest concentration of the surname Holtzclaw in the nation.

Horine (var. sp. Hohrein, Hohrain, Hoherrain, Horein, or Horein, etc.). The family name Horine was probably derived from the German words "hohen" and "rein," which used together means "high ridge." One Horine ancestor had said the name meant "high-up-on-the-Rhine." The oldest known reference to the use of this name was that of Jerg Horein, born in 1530 in Grantschen, near Heilbronn, Germany (Horine 1951).

The early Bullitt County Horine settlers begin with three brothers who came to America in the 1770s, sons of Frederick Horine, born 1715 in Alsace-Lorraine, France (Davis 1997; Jones 1973). George (b. 1756) came to Jefferson County, Kentucky in 1790 and died in Mercer County, Kentucky about 1815. Michael (b. circa 1752) moved from Maryland to Mercer County in 1795 with his brother, Jacob (b. 1754). In 1798, he and Jacob settled in Bullitt County, Kentucky (Jones 1973). Michael subsequently moved to Missouri (about 1802) and was murdered in July 1810. He was buried in the Horine Cemetery in Richwoods, Washington County, Missouri.

Before Jacob moved to Bullitt County, he served two enlistments in the Continental Army. He was a Private in the 8th Company, New 11th Pennsylvania Second Line and in the Company of Captain Andrew Boggs, 7th Battalion, Lancaster County Militia in 1780 (Egle and Linn 1890:106). After the Revolutionary War, he married Barbara Swartz and moved to Kentucky with his brother's family to claim military land grants in Bullitt County (Virginia Land Office Grants No. 12-14 1787-1788) (**Figure 42**). They established homes on Knob Creek.

Additional information about the next Horine generation may be found in the following chapter.



Jacob Horine
300 acres
Jefferson County
&c

Beverley Randolph Esquire Lieutenant Governor of the Commonwealth of Virginia To all, To whom these presents shall come Greeting Know ye that by Virtue and in consideration of a Land Office Treasury Warrant Number Thirteen thousand Six hundred and eighteen Issued the third day of August one thousand Seven hundred and Eighty six There is granted by the said Commonwealth unto Jacob Horine a certain Tract or parcel of Land containing Five hundred acres by survey bearing date the fourth day of July One Thousand Seven hundred and eighty four lying and being in the County of Jefferson on Mill Creek Waters of Tallhico and bounded as followeth Viz. Beginning at the mouth of a branch that thrusts up in the Bald hills at a Beech and Sugartree running North Sixty degrees West One hundred poles to a Sugartree Ash and Elm thence North thirty degrees East four hundred poles to a Sugartree and Ash thence North Sixty degrees East Two hundred poles crossing a branch to a white oak and black thence South thirty degrees West four hundred poles to three White oaks thence North Sixty degrees West One hundred poles crossing a branch to the Beginning With its Appurtenances to have and to hold the said Tract or parcel of Land with its Appurtenances to the said Jacob Horine and his Heirs forever In Witness whereof the said Beverley Randolph Esquire Lieutenant Governor of the Commonwealth of Virginia hath hereunto set his hand and caused the Seal of the said Commonwealth to be Affixed at Richmond on the thirty first day of August in the Year of our Lord One Thousand Seven hundred and Eighty Seven and of the Commonwealth the Twelfth.

B Randolph

Figure 42. Horine Land Grant.

Mitchell. The Mitchell family has a long and impressive history in the area. The family, particularly Dennis Mitchell, was very involved with affairs of the area, including the establishment of the school on Mitchell Hill Road that has become the Welcome Center. The Mitchell family was connected to other families in the area in a number of ways, including intermarriages. While researching her Caple family history, genealogist Victoria Caple Kaelin found much information on the Mitchell family as well. She provided the following information.

Dennis Mitchell (1838-1936), was the son of James and Solinda (Morgan) Mitchell. He married three times, two of which were Caple sisters. Dennis married his first wife, Catherine "Kate" Caple (1844-1893), on June 30, 1864. Their children (dates provided by markers in the Mitchell Cemetery) included the following:

- Sarah Jane Mitchell
- Samuel L. Mitchell (1870-1933)
- Jacob H. Mitchell (1872-1959)
- Carrie E. Mitchell (1874-1893)
- Martha Jane Mitchell
- Maynard Mitchell

Ms. Kaelin goes on to state: "His second wife was Sarah Jane Caple Graham, 1843-1916, widow of Job Cepheus Graham. She married Dennis March 05, 1895. They had no children together. The census shows Dennis married a third time to Lilly Unknown." Many are buried in the Mitchell Cemetery (C73g) (**Figure 43**).

Dennis Mitchell appears to have served in the Union forces during the Civil War with the 1rst Battalion, Louisville Provost Guard, Kentucky Volunteers (NPS 2009).

Figure 43. Dennis Mitchell and Sarah Jane (Caple) Mitchell Gravestone, located in the Mitchell Cemetery (C73g).

Moremen (var. Moorman, Mooreman, Moman). The Moremen family came to the area a bit later than the others, but was very influential in this section of the county from the mid-nineteenth century into the twentieth century. The Moremen estate, Riverside, is located west of JMF on the Ohio River. It functioned as a matrix of agricultural industries, and also as a river landing, which meant they also had economic ties to the Louisville--New Orleans river commerce. The history of the family that follows summarizes information from Patti Linn and Donna M. Neary (1998).

The first members of the Moremen family into this area, Alanson (previously D'Alanson) and Rachel Stith Moremen, moved to the Farnsley estate from Brandenburg, Meade County, Kentucky in 1860 with six of their eleven children. The estate was rented for two years prior to its purchase in 1862. Prior to the Civil War, 23 slaves also lived at Riverside. After emancipation, many probably found jobs elsewhere, although some such as Kitty Moremen Thomas continued to live and work at the estate.

As depicted on the 1879 Beers and Lanagan Atlas, the estate had been named Riverside by that time. Alanson and Rachel increased the property from under 500 acres to 1500 acres. Nold et al. (1997) note that 1100 acres of this estate was east of Dixie Highway, putting much of the farm closer to the vicinity of JMF. The farm included some cattle, sheep, dairy cattle, and swine. In addition to grain crops such as oats, barley, and corn; the estate was known for its apple and peach orchards (Linn and Neary 1998:24-25). A necessary sister industry of the orchards, beekeeping, also supplied honey and beeswax. During the latter half of the nineteenth century, the estate became known as "Soap Landing" in reference to the lye soap made and sold by Rachel Moremen.

In 1886, the house and 200 acres were transferred to Israel Putnam Moremen and his wife, Nannie Storts Moremen. Other family members also acquired parcels of the original estate through the 1870s and 1880s. The portion with the house remained in the Moremen family until 1988, when it was purchased by Jefferson County. Today, the estate is known as Riverside, the Farnsley-Moremen Landing and features a Visitors Center, museum store, house tours, shelter, continuing archaeological excavations, and school group tours.

In addition to the property along the Ohio River, one knob currently within JMF is known as Moremens Hill. Its relationship to the Moremen family is at this time inconclusive, but the Meadowlawn precinct of the 1879 Beers and Lanagan Atlas documents a residence for H. W. Moremen along Pond Creek immediately northwest of the knob. This residence and surrounding acreage could have been the home of Horace W. Moremen, son of Alanson and Rachel.

Snawder. (Originally Schnatter, var. Anglicized sp. Snowder, Snatter, Snadder, etc.). Thomas Schnatter, born in 1764 in Durrheim, Villingen, Baden, Germany, was the progenitor of all the families of that surname in the Jefferson-Bullitt County area. Thomas had been a Hessian mercenary soldier, hired by the British to fight Colonials during the Revolutionary War. In those days, German lands were split into thousands of independent states. Each of these were ruled by princes, dukes, margraves, or other privileged person who had their own armies, laws, and even financial systems. England reached out to greedy German margraves to rent their armies. Thomas was one of these "rented" soldiers, serving in Jäger Company III with the Ansbach-Bayreuth infantry troops commanded by Lt. Colonel von Reitzenstein (Stadtler 1956:131).

The Jäger companies were largely composed of professionally trained foresters or game wardens who were sharpshooters. It is possible Paul Yost was not Jefferson Memorial Forest's first forester. Jäger, which in German means "hunter," also refers to the type of rifle these soldiers carried. In appearance and mechanical workings, it was very similar to the Kentucky longrifles, except the barrels had been substantially shortened for quicker reloading in skirmish combat. In fact, the Jäger companies had been hired by the English specifically to "level the playing field" against the Kentucky marksmen (Russell 1940:19).

Thomas arrived in America in 1781 and was captured during the Battle of Yorktown. Prisoners were released after the war, and he was transported back to Bremerlehe, Germany aboard the ship *Tyger*, arriving on September 20, 1783 (Stadtler 1956). However, by 1790, he was back in America. That March in Nelson County, Kentucky, he married Catherine Sterneter (born 1769 in Maryland), daughter of Franz Starnater and Sarah Pyburn (Thomas Crain, personal communication July 17, 2008). It is thought that Catherine's father, Franz, also served in a Hessian Jäger company. Thomas remained in Bullitt County until his death in 1824. Catherine died about 1845 near Bear Camp Run in Jefferson County. Thomas and Catherine bore eight children and left multitudes of Schnatter descendants in Bullitt and Jefferson counties. Papers documenting the Snawder/Schnatter genealogy in the JMF archives stated the following:

> The emigrant to this country was Thomas Snawder born about 1764 in Germany. He was a farmer in Kentucky probably as early as 1789. On March 19, 1790 he married Miss Catherine Sternater (or Starneter) who was also born in Germany about 1765. Catherine and her family were in Kentucky as early as 1785. She had brothers John Sterneter of Washington Co., Ill. Andrew Sterneter a war of 1812 veteran of Givson Co., Ind. Francis Sterneter and Joseph Sterneter and sister, Elizabeth (Mrs. Abram Thorn). The marriage record for Thomas & Catherine is recorded at the Nelson County Court House in Bardstown. However, they were probably married in what is now Bullitt County which was formed from a part of Nelson County in 1797. They were married by Rev. Benjamin Linn a pioneer Baptist Minister. Shortly after their marriage Thomas changed the spelling of his name from Schnatter to the anglicized present day spelling of Snawder. In 1817 he purchased 311 acres on Briar Creek from Nicholas Buckner. The land is situated mostly in Jefferson Co. but a small part adjoined in Bullitt Co. Bear Camp Road and Briar Creek run through the property from one end to the other. Thomas died in the fall of 1824. Catherine died about 1845. They had at least eight children: John, Joseph, Thomas Jr., Andrew, Peter and (three daughters whose names and who they married are not preserved). There are at least two old cemeteries on the property—the old Wilson-Snawder cemetery on the east side of Bear Camp Road and the old cemetery on the west side of Bear Camp road, surrounded by a rock wall containing about five graves (probably those of Thomas Sr., Catherine, Thomas Jr., his wife, Mary and probably one of Thomas Jr.'s sons.
>
> 1) John Snawder born 1791 and died in the winter of 1846-47. He married Miss Elizabeth Arnold March 21, 1810 the daughter of Adam Arnold the founder of Arnoldtown, KY. She was born in Washington Co., Md. in 1793 and survived her husband by a few years. He was a farmer on 154 acres on Bear Camp Run settlement on branch of Pond Creek which he purchased in 1831. Their children: (1) Ann Snawder married Hiram McDaniel, (2) Samuel Snawder married Nancy Matzenbaughen, (3) Peter Snawder married Sarah Ann Ray, (4) Elizabeth

Snawder married Francis Sheely, (5) Catherine married William Smith, (6) Margaret married Anthony Wiser, (7) Mary married David Wilson, (8) Joseph married his 1st. cousin, Mary Jane Snawder (dau. of Peter).

2) Joseph Snawder born 1796 and died about August of 1880. Married Miss Luvinah Collins 20 April 1820. She was born in Virginia and survived her husband by a few years. Joseph got control of his father's land (311 acres) by buying the shares from his brothers and sisters. He made a will May 8, 1879 leaving 34 5/9 acres to each of his children or said child's heirs. They and at least six of their children are buried in the old Wilson-Snawder cemetery. Their children: (1) Thomas married Sarah Ann Lee, (2) George P. married Thursa Jane Rarden, (3) Clementine married William Dillon, (4) James married Eliza Collins, (5) Adeline married John A. Stone, (6) Angeline married John Dillon, (7) Ben Frankllin a soldier in Civil War (Union) married Sarah Stone, (8) Melvina married John T. Rarden, (9) Peter soldier in Civil War (Union) died of pneumonia 12 May 1865 at the Cumberland Gap., (10) William married Barbara Harschfield.

3) Thomas Snawder, Jr. born 1798 and died about 1833. Married about 1822 Miss Mary _____. They lived and farmed on his parents' land. Their children: (1) Fontain Snawder married Elizabeth Dooley and (2) Francis Snawder married Aley D. Burgess.

4) Andrew Snawder born 1800 and died in early 1850's. He married Miss. [unclear] Pohon Oct. 1823 the daughter of William Pohon a Revolutionary War soldier from London, England. About 1851 he and his children moved to Shelby County, Missouri. Lived on Pond Creek.

5) Peter Snawder born 1808. He married Miss. Delilah Arnold in 1832. He lived on 122 ½ acres on Pond Creek. Shortly after the Civil War he and his children moved from the state of Kentucky. It is believed they moved to Illinois.

3

Formation and Historical Development of the Forest

At the time of the formation of the JMF, the county forester was Major Paul A. Yost. During statements about the preserve, Yost emphasized the need for a forest resource closer to the Louisville metropolitan area—preferably one within Kentucky similar to the resources available in Indiana such as the forests of Brown County and Hoosier National Forest. As a former Indiana State Forester (1940-1942), Yost knew the responsibilities of operating a forest preserve well. The commission formed to study the matter included representatives of the tourism industry, manufacturing industry, veterans, and conservationists. As identified in Yost's statement, the Jefferson County Forest Commission consisted of:

> Judge Horace M. Barker (Chairman); the three county commissioners, Mr. E.P. White, Jr; Mr. Miles Thacker, and Mr. Edward Torsteick, and the following citizen members: Mr. Eugene Stuart, Secretary of the Louisville Automobile Club; Colonel Henry J. Stites, representing the American Legion; Tom Wallace, Editor of the *Louisville Times*; William A. Coffee, representing Veterans of Foreign Wars; Mr. Harold C. Moser, of the Research Staff of Gamble Brothers; and Mr. L.A. Henry Baass, with the United Spanish War Veterans.

Stuart E. Lampe and Robert A. Fihe also served on the commission.

Legislation that had to pass to enable the county to purchase and manage the forest included House Bill 342 and House Bill 469. After four years of work such as this, the JMF was dedicated on October 10, 1948 to honor Kentucky veterans of World War II. At this time, approximately 1500 acres had been acquired for the price of $10/acre. Aspirations were to acquire 30,000 acres. Since that time, land acquisitions have continued. Funds from the Kentucky Heritage Land Conservation Fund (funds derived from nature license plates) were used from 1997 through 2003 to buy the Rayhill, Mitchell, Coogle, and Churchman tracts. As a mitigation package for the construction of Riverport Industrial Park, loans enabled tracts such as Scotts, Catholic, Allen, Farnsley, and Houchin to be purchased in 1982. In 1951, condemnation proceeding acquired the Hoefflin and Walker tracts. Gifts of land were accepted in 1988 (Stober Tract) and 1989 (Horine Reservation). Values ranged from the original $10/acre standard purchase price to $2500 in 1982 for one of the Scotts tracts (JMF 2008; JMF Archives n.d.a).

Landuse activities envisioned at its inception included "skating, skiing, and sledding in the winter" and "hiking, horseback riding and picnicking in the spring, summer, and fall" (Jefferson County Forest Commission Letter 1948). A strong partnership with area schools was also fostered from the very beginning. Over the years, landuse has included timber management, fishing, horseback riding, bird watching, use as a Boy Scout and Girl Scout camp, conference center, orienteering including geocaching, and an obstacle course associated with team-building programs.

The forest was dedicated to honor Kentucky's veterans, and this purpose was reaffirmed in 1965 by a proclamation by the Jefferson County Playground and Recreation Board that rededicated the forest to Kentucky veterans of all wars. A number of veterans of past wars are

interred in and around the forest. As a memorial to veterans, it appears fitting that JMF should be especially cognizant of these gravesites and incorporate information regarding them into their interpretive material and programs. **Table 14** summarizes data encountered during the assessment of cultural resources for the forest. This list may not be complete and warrants updating.

Table 14. Veterans who lived and/or were buried in the vicinity of the JMF

Military Service	Name	Note	Gravesite Location	Family Relationship	Source
unknown	Capt. Eli P. Farmer	"Capt" noted on gravestone b. 1817, d. 1890	Mt. Holly Cemetery		gravestone
Continental Army (could have been between 1775 and 1783)	Jacob Horine			great-great grandfather of E.F. Horine	JMF n.d.b
Revolutionary War	Col. James F. Moore				
Corps of Discovery (August 1, 1803 to October 10, 1806)	Joseph and Reubin Field	Lewis and Clark Expedition Privates			Field and Field 2006
Kentucky Militia	Col. John Todd	died in Battle of Blue Licks 1782; his grant of area included Mann's Lick			Kleber 2001
	Capt. George Horine			great-grandfather of E.F. Horine	JMF n.d.b
Other militia	Andrew Caple	Family lore suggests served with Gen. Sinclair, with Maryland militia	Caple family cemetery	Common ancestor of most Caple families in area	Victoria Caple Kaelin, personal communication 2008
War of 1812	Lemuel and James Blevins				1820 census

Military Service	Name	Note	Gravesite Location	Family Relationship	Source
Civil War	Albany Caple	Confederate		son of Andrew Caple	Victoria Caple Kaelin, personal communication 2009
	Squire Caple (1839-1907)	Union	Mitchell Cemetery (C73g)	grandson of Andrew Caple, son of Nelson and Sarh Jane (Potts) Caple	Victoria Caple Kaelin, personal communication 2009
	Dennis Mitchell (1838-1936)	Union Private	Mitchell (C73g)		NPS 2009
	Ben Franklin Snawder	Union		Son of Joseph Snawder	JMF n.d.c
	Peter Snawder	Union died May 12, 1865 at Cumberland Gap		Son of Joseph Snawder	JMF n.d.c
WW I	John Dennis Griffin (1887-1971)	Pvt US Army	Mitchell (C73g)		HLPDC files
	Louis E. Proctor (1893-1960)	CPL HQ CO 90 Infantry	Mitchell (C73g)		HLPDC files
WW II	James E. Beeler, Sr. (1904-1977)	CCM US Navy	Holsclaw Hill Road Cemetery		HLPDC files
	Carl H. Mitchell (1909-1982)	PFC US Army	Mitchell (C73g)		HLPDC files

INFLUENTIAL PEOPLE

It is no coincidence that focal points of the forest were named as such. Several of the forest's recreational areas were named for individuals who were influential in the formation of the JMF.

Tom Wallace

Figure 44. Tom Wallace

In addition to being the local paper editor, Wallace (1874-1961) (**Figure 44**) was known for his conservationist ethic and also his well publicized victory over the prevention of the installation of a hydroelectric dam at Cumberland Falls in the 1930s, for which he received the Pugsley Silver Medal. In 1946, Wallace was appointed president of the Izaak Walton League of America, a conservation organization founded by anglers and named for the author of *The Compleat Angler* (Huffman 2008; Izaak Walton League of America 2008).

Wallace was born in Hurricane, Kentucky and spent his early adult years as a bookkeeper. By 1900, he had decided he hated business, and began working for the *Louisville Times* as an unpaid police reporter. He was soon offered a salaried position and subsequently worked at *The Evening Post, The Louisville Herald, and The St. Louis Republic* before returning to the *Times.* He was named chief of the editorial staff there in 1923 and served as Editor from 1930 to 1948.

Wallace had a deep concern for the land. He disliked artificial "improvements" on nature. He enthusiastically spearheaded efforts against stream pollution and towards the preservation of forests and wildlife.

> *The time will come, if vandalism proceeds, if conservationists are called mere visionary fellows, when the hills surrounding Pineville and Harlan on the Cumberland River, those above Irvine and Beattyville and Whitesburg on the Kentucky River; those about Pikeville on the Big Sandy, will be denuded – and when the hills all over the state… will be bare and bleeding under the pelting of every rain." He observed that those hills "will produce merchantable timber and provide range for game, but will not produce crops or provide pasture.*

Wallace also had a vision for the national parks. He spoke in 1933 to the National Conference of State Parks and predicted that in the future there would be a chain of parks across the country so that

> *the traveler who has the time, and can spend a few dollars a day for his transportation and accommodation may travel from the Atlantic Coast to the Pacific Coast, and from the Lakes to the Gulf, stopping each night at a different State park, enjoying the simple, but substantial, comforts of a park inn.*

The Tom Wallace Lake in the JMF honors his endeavors, along with the Tom Wallace chapter of the Izaak Walton League and the Tom Wallace Chair of Conservation that was established in the Biology Department of the University of Louisville (http://www.rpts.tamu.edu/pugsley/Wallace.htm).

Paul Alexander Yost

It appears to be no accident that a representative of Gamble Brothers, a manufacturer of wooden cabinets and doors, was on the commission (All Business 2008). As is typical of forestry policy during these years, Yost's vision included sustainable harvesting of the forest. In the following statement, Yost outlines his vision of the forest as a resource to be useful. He explains the difference between a forest and a park:

> *A park is an area of land which has been dedicated to some one main purpose. The purpose might be recreation alone, the commemoration of some battle, or the restoration of some historic landmark. Generally speaking, timber and other forest products are not produced from a park. Parks are generally managed on the premise of a 'let alone' policy. Forest on the other hand go much further. They are generally dedicated to the purpose of providing recreation, the conservation of wild life, the protection of water sheds, and the production of forest products on a sustained yield basis.*

Paul A. Yost was born July 4, 1904 and resided in Upton, a borough of Chester, Pennsylvania. Paul's father, George Halvard Yost, was a Norwegian immigrant who came to America about 1886 and was naturalized in 1895 (United States Bureau of the Census 1910). George had studied engineering in Oslo and was a structural steel worker and foreman for construction projects all over the East Coast. He was recognized as one of the most daring, working on dangerous projects involving heavy steel beam work, such as bridge, high-rise, and elevated railway projects (Chester Times (CT) 1927). Because of the construction industry's high demand of George's special skills, he kept a busy travel and work schedule away from the home front for long periods of time. During his long absences, Paul, an only child, found fatherly guidance through various local groups, such as the Boy Scouts of America (BSA), Young Men's Christian Association (YMCA), and the Order of DeMolay. The high moral and social requirements of these groups helped to shape young Paul's character, the effects of which could be seen throughout his life.

Paul was a young celebrity in the Chester area, as witnessed by the many local newspaper articles documenting his activities. Newspaper articles in 1918 reported his progress in becoming a second-class Boy Scout (CT 1918a). He became the bugler for Troop 12 and evidently was quite talented (CT 1919a, 1952a). Paul won many scout awards, and he and Troop 12 participated in many of Chester's Fourth of July parades, World War I bond drives, and other important social events (CT 1918b-h; 1919c).

One of the summer camps frequented by Troop 12 was Camp Neshaminy, near Langhorne, Bucks County, Pennsylvania (CT 1952b). The BSA camp was directed by University of Pennsylvania's head wrestling coach, J. Leonard Mason (also a Chester resident), who was also responsible for organizing and coaching the gymnastic and boxing programs at the university (University of Pennsylvania 1906:217,220; 1927:309). Mason's philosophy was that young men could be kept out of trouble by keeping them busy with sports, and at the same time,

they would learn important virtues like teamwork and self-discipline. Paul spent at least two summers at Camp Neshaminy under Mason's influence and became quite athletic. In the BSA, Paul made his mark early, and it was this organization in which he first exhibited a mature, deeply felt love for nature and learned the appreciation for regimentation, integrity, and responsibility.

At Chester High School (CHS), Paul was involved in sports and many extracurricular events. He was a star basketball player, involved in local plays (CT 1919b) and various YMCA activities, and belonged to the Order of DeMolay, a Masonic youth fraternity, whose mentoring focused on the development of civic awareness and leadership skills (CT 1928).

It was Chester High School where Paul met and fell in love with his future wife, the beautiful Jeanne Moore Bailey, Vice President of her graduation class (CHS 1923). Jeanne graduated in 1924 and attended Temple University until 1925, when she entered the nursing program at Samaritan Hospital. Hospital rules were strict in those days, and regulations were that student nurses had to remain single. After Jeanne finished the program in early 1928, it was revealed that she and Paul had secretly married at Elkton, Maryland on August 1, 1925 (CT 1928).

After Paul graduated high school in 1923 (CHS 1922, 1923), he worked as a chemical lab technician (Yost, Jr. 1966). He was also a Chester Athletic Association member and elected to the post of cheerleader for the 1923 season (CT 1937). In 1923-24, Paul managed the Chester High School football team, nicknamed the "Orange and Black Gridiron Warriors" (CT 1924a,1924b).

In 1925, intent upon marrying soon, Paul realized he should obtain a college degree to ensure financial stability. With his love for the outdoors, he chose to attend Pennsylvania State Forest Academy (PSFA) in Mont Alto. The Mont Alto campus was located in south-central Pennsylvania, between Chambersburg and Gettysburg, on the edge of Michaux State Forest. This forestry academy was one of only three in the nation, including Yale and Biltmore. The school was established by Joseph Rothrock, famous arctic explorer and botanist, for the purpose of providing men ready for state forestry service. Curricula included botanical studies, nature conservation methods, and fire fighting techniques. Paul began his studies there in the fall of 1925 and finished his degree in June of 1929 (Gettysburg Times (GT) 1929; PSFA 1929) (**Figure 45**).

Figure 45. Mont Alto Academy Senior Paul Yost (Psfa 1929). The Oak College Yearbook.

The Great Depression started the year he graduated from the academy and finding work was nearly impossible. His first child, Paul Jr., had been born that January and his need for employment was desperate. Paul's first job was at a mine timber preservation plant operated by U.S. Steel in the Pennsylvania coal-mining region (Yost, Jr. 1966). By the following February, his second son, Laurence Halvard, was born. As his family was growing, the depression was deepening. Shortly thereafter, the preservation plant closed, and Paul again found himself unemployed.

In order to have some income coming in, Paul took a job as a Fuller Brush salesman. His energetic and warm personality soon earned him the position of District Sales Manager, but the monetary rewards were not sufficient. With the Depression at its worst, he went to Chesapeake, Maryland to seek a better job. There, he entered the U.S. Army Corps of Engineers office to inquire about a forester position. Luckily, the Chief Engineer had just finished a project repairing several levees on the Chesapeake & Ohio (C & O) Canal. The repaired levees required reforestation --- Paul had walked in at just the right moment. By the end of the summer of 1931, the reforestation had been completed. At that time, Paul was offered a position as the officer in charge of an army patrol boat on the canal (Yost, Jr. 1966).

Prohibition was still in effect, and the primary purpose of Paul's patrol was to identify and stop the boats illegally trafficking liquor (known as "rum-runners") on the C & O Canal. This was a very dangerous job for enforcers, as rival gangs were at war over the control of contraband profits and most were heavily armed (Kelly 2005:20). Although this job paid well, when Prohibition laws were repealed in 1933, Paul immediately sought employment more in line with his college training.

In late 1933, Paul contacted a Mont Alto Academy alumnus, Ralph Wilcox, who had just been appointed the Indiana State Forester (GT 1925; Kriebel 1987:70,91). He had hoped that Wilcox

could use another forester. That December, the Indiana Civilian Conservation Corps (CCC) camps had been grouped into what was known as the Fort Benjamin Harrison District CCC, and organized into four districts for the purpose of coordinating command (Museum of the Soldier 2008). The authority of the district camps was divided between an Army camp commander, who supervised worker activities within the camp, and a civilian superintendent, who coordinated project work outside of the camp (Paige 1985). Wilcox did need a superintendent in the District of Northern Indiana at Camp 56-S in Medaryville, Indiana. Based on his previous employment experiences and education, Paul was a perfect camp superintendent candidate, and Wilcox offered him the position (American Tree Association 1934; Society of American Foresters (SAF) 1935:49). Finally, Paul was back in his element. He immediately organized CCC camp campaigns to reduce the rampant forest fire hazards, to replant trees in devastatingly soil-eroded areas, and to provide much needed forest insect and disease control in the neglected northern Indiana countryside (Bramble 1965:22-25, IDNR 2008; SAF 1941:62).

Paul accepted increasing responsibilities, becoming the District Forester (Jackson County State Forest near Brownstown) in 1936 (CT 1936; Indiana Department of Natural Resources (IDNR) 1936:56), the Associate State Forester in 1939 (IDNR 1940:319), then the Indiana State Forester (Indianapolis) in 1940 (CT 1941, IDNR 1940:982). During the years 1940-1942, there were many Indiana newspaper articles carrying Paul's "you can prevent forest fires" public education campaign message (Kokomo Tribune (KT) 1941a, 1941b, 1942b; Vidette Messenger 1940). Other notable activities during his term as State Forester included helping to establish the 1,256-acre Frances Slocum Forest Preserve in Peru, Indiana as a state park (KT 1941c), helping to organize the Indiana Forest Fire Fighters' Service (IDNR 1936:55,829; King 1938:3), promoting a cooperative farm-forestry project that earned Hoosier farmers money by providing their field timber for war uses (KT 1942a), creating the Jasper-Pulaski County Tree Nursery (IDNR 1940:986), and nurturing a strong Conservation Department relationship with the Boy Scouts, involving them in reforestation and soil conservation activities (Indiana Historical Bureau 1942:90-91; 1943:42-43,103; 1965:90-92).

After war was declared on Japan, Paul performed his patriotic duty and took a commission on May 16, 1942 as 1st Lieutenant in the Army Air Corps (IDNR 1942:184; SAF 1942:55) (**Figure 46**). He was trained at Peterson Air Field at Colorado Springs, and then was stationed at MacDill Army Air Field in Florida. MacDill Army Air Field was the headquarters of the Air Defense Command Third Air Force. The base's primary missions were to protect the continental U.S. and to train combat crews as bombardiers aboard the Flying Fortresses and Super Fortresses (B-17s and B-29s). At MacDill, Paul served as Squadron Adjutant. Later, he was promoted to Major after transferring to the Pacific Theatre and serving as Executive Officer of the 19th Photographic Charting Squadron (**Figure 47**) (CT 1944). This B-29 squadron, operating from Saipan and Guam, achieved notoriety by obtaining crucial aerial photographs during their perilous reconnaissance missions over enemy territories in the Pacific.

Figure 46. Paul Alexander Yost.

Figure 47. 19th Photo Charting Squadron and The Patsy Jean II.

In late 1944, Paul barely escaped with his life after a surprise Japanese air raid on Guam (Yost, Jr. 1966). At the time, he was traveling by jeep when an aerial bomb exploded nearby. The jeep was violently tumbled and Paul was left pinned underneath, suffering serious injuries. When he was able to travel, he was returned to MacDill Army Air Field. Having only partial use of his right arm, Paul was placed on inactive duty in December 1945. He was awarded the Victory Medal, the American and Pacific Theatre Ribbons, and two Bronze Stars (Courier-Journal (CJ) 1946; CT 1946).

Returning to civilian life, Paul accepted a position offered by the Jefferson County Forest Commission on May 1, 1946, as the first Jefferson County, Kentucky Forester (CJ 1946a; CT 1946). The Commission had hired the secretary of the National Recreation Association, L. H. Weir, to conduct a field study looking for recreational possibilities there. From the study, Paul and the Commission picked out a forested area near Fairdale to establish the beginning of a forested recreational area. By September, Paul “grew” the Jefferson County forest area to 1,000 acres and had persuaded the Bullitt County Judge to allow acres to be added to the forest from that adjoining county (CJ 1946b, 1946c). On October 10, 1948, the area was named the Jefferson County Memorial Forest and dedicated to World War II veterans (Kleber 2001:440).

All of the public education techniques Paul used as Indiana forester, he used in Jefferson County. He helped to train Boy Scouts in conservation methods and involved Fairdale High School students to keep fire watches (Kleber 2001:440). Paul even used his sense of humor to draw attention to the newly established forest. In 1948, he amused readers across the country with a UP story carried by almost every major newspaper. The story involved his Jefferson County Squirrel Club. It was an “exclusive” club and the only membership requirement was “the ability to climb the 200-foot Holsclaw fire tower near the Jefferson County line” (Evening Observer 1948).

Paul continually solicited organizations to help provide solutions to Kentucky’s forestry problems. A new conservation group was formed in 1949 called “Keep Kentucky Forests Green.” Paul attended the organizational meeting that included Governor Earle Clements and representatives from various groups like the Daughters of the American Revolution, American Forestry Association, Chamber of Commerce of the United States, and Kentucky Department of Conservation, to name a few. Representatives of these groups pledged to provide organized protection for Kentucky forests and to treat timber, not as an exploitable resource, but as a renewable crop to perpetuate (CJ 1949). By 1952, Paul was the organization’s Executive Director (Daily News (DN) 1952). In 1952 and 1953, he attended meetings of Kentucky bankers, civic groups, and business leaders to outline how they could be of greater service to their communities in conserving and developing the state’s forest resources (DN 1953).

While Paul had been the County Forester (1946-1955), approximately 2,000 acres of forestlands had been acquired and cleared of brush and undergrowth (CJ 1955; Yost, Sr. 1949). A dam had been built to form the Tom Wallace Lake to supply fresh water for the wildlife in the forest. The lake was stocked with various fish species to provide a fisherman’s recreation area. The Holsclaw Fire Tower had been built to keep sentinel fire watch over nearly 35,000 acres. A prohibition against hunting allowed wildlife to repopulate the forest (Kleber 2001:440). Paul had transformed the Jefferson County Memorial Forest from a practically lifeless fire hazard (Yost, Sr. 1947) to a thriving, lush recreational area for all to enjoy.

Paul retired and moved to Treasure Island, Florida in late 1955 (CJ 1955). He kept busy socially, becoming a member of The Shrine, Tampa Consistory of the Scottish Rite, the Masonic

Gulf Beach Lodge 291, the Holiday Isles Elks Lodge 1912 of Medeira Beach, and the Retired Officers Association. Enjoying his retirement, he obtained a Coast Guard license and was captain of an excursion boat, the *Goodtime*, operating at the St. Petersburg Municipal Pier. Paul passed away at age 67 on October 13, 1971, survived by his wife, two sons, and eight grandchildren. He was interred at Arlington National Cemetery with full military honors (Section 47, Site 76) (CT 1971).

In 1983, the Jefferson County Memorial Forest area known as the Forest View Section was renamed the Paul A. Yost Recreation Area in honor of the community's most dedicated and appreciated first forester.

Dr. Emmet and Helen R. Horine

One well-known descendant of the Jacob Horine family was Dr. Emmet Horine (b. 1885), son of Dr. George Horine (b. 1827) (**Figure 48**). George Horine had removed his practice from the Louisville area to Americus, Georgia when Emmet was but seven years old. When George died in 1903, however, the family returned to Louisville, Kentucky. Emmet earned his degree from the Kentucky School of Medicine in 1907 and was appointed an internship at St. Anthony's Hospital. Later he became a distinguished cardiac surgeon (Johnson 1912).

Figure 48. Emmet Horine.

Helen Ruthenburg Horine (1890-1965) was born in New Albany, IN. After graduating Phi Beta Kappa in 1912 from DePauw University, Helen taught school until her marriage to Emmet in 1914. Over the next nine years, their family increased to include four children, including three daughters and one son. During this time and afterwards Helen was very active in volunteer groups promoting positive race relations and counseling on marriage and family issues. Her stance on race equality was evident when she withdrew her Phi Beta Kappa membership over discrimination of African American members during the local membership annual banquet. Volunteer work included work with the Highland Presbyterian Church, the Highland Mothers' Club (as founder), in parent-teacher organizations, a Chautauqua group, and the Interracial YWCA board. In addition, Helen assisted with her husband's medical writing, including editing works and transcribing Latin documents (JMF n.d.b).

In the 1920s, appreciative of nature and longing to restore his ancestral lands, Emmet and Helen began to acquire property that once belonged to his early pioneer relatives. In 1946, the Horine family moved to their new High Acres Farm. In 1961, Emmet and Helen entered into a trust agreement with the Old Kentucky Home Council (now the Lincoln Heritage Council) of the Boy Scouts of America, giving the BSA 1,237 acres, including over a hundred acres of native forest, a sawmill, motor, three tractors, disc plow, log wagon, and various logging tools. The Horines' High Acres Farm estate became known as the Helen and Emmet F. Horine Boy Scouts

of America Reservation. Within the document, it appears the BSA had an additional trust document dated 1952, suggesting the BSA involvement goes back almost 10 years earlier than 1961. No additional information could be gathered regarding the 1952 agreement. According to the 1961 trust agreement, the purpose of the gift included the following:

"…the perpetual preservation of its natural resources; for a perpetual natural refuge for birds and animals; for the protection of the timber presently on said lands and the further planting and cultivation, in good forestrylike manner, of other and additional trees and the proper harvesting of ripe timber therefrom; for the promotion of the ability of boys to be useful citizens, to train them in Scoutcraft and to teach them patriotism, courage, tolerance (both locally and world-wide), self-reliance and kindred virtues."

This council managed the property for 28 years. In 1989, however, the Boy Scouts of America moved on to the Harry S. Frazier Jr. Scout Reservation (known to many for its Camp Crooked Creek summer program) in Clermont, Bullitt County. In September 1989, Emmet's descendants therefore generously donated the Horine Reservation property to Jefferson Memorial Forest in an effort to forever ensure the preservation of the land the Horines so loved.

Mitch McConnell

Perhaps one of the most important local government offices in the development of JMF has been that of the Jefferson County Judge/Executive. As head of the Fiscal Court, the appropriation of funds for land acquisitions within the county falls within the purview of this office. From 1978 to 1984, Mitch McConnell held this office. During that time, acquisition of land at JMF had been a priority, including $1.3 million in federal community development funds (*Courier-Journal* 1984), which enabled the purchase of 1,694 ac (JMF 2008). In addition to land acquisition, many structures were also envisioned, including a lodge at the forest and motels in the surrounding areas. As noted at JMF 2008, these funds were part of the environmental mitigation for the development of the Riverport Industrial Park.

During McConnell's tenure as Jefferson County Judge/Executive, a total of 1,991 ac were added to the forest with the assistance of Wilderness Jefferson County and the Sierra Club. Consequently, the trail through the Forest View Section was renamed the Mitch McConnell Loop Trail (JMF 2008).

McConnell was born in Sheffield Alabama in 1942, but came to Louisville with his family when still young. While attending DuPont Manual High School, McConnell served as student body president. After graduating with honors from the University of Louisville, McConnell attained his J.D. in 1967 from the University of Kentucky College of Law. From 1968 to 1976, McConnell served as legislative assistant to Senator Marlow Cook and in the Justice Department. After his 1977 to 1984 work as Jefferson County Judge/Executive, McConnell won his bid for the US Senate (Kleber 2001).

David L. Armstrong

David Armstrong (**Figure 49**) served as mayor of Louisville from 1999 to 2003. His main contributions to JMF, however, occurred during his tenure as Jefferson County Judge/Executive from 1989 to 1999. During this time, JMF expanded its holdings, and landuse practices throughout Jefferson County were assessed and published as the Cornerstone 2020 plan. In August of 1990, Armstrong formed the Jefferson Memorial Forest Committee and appointed

members who began designing a plan for the development and protection of the forest (Plan for the Future, May 1991).

Armstrong was the 1998 recipient of the Outstanding Service to Environmental Education by an Individual Award. This award recognizes individuals instrumental in promoting and providing environmental education leadership at the local, regional, and global levels (http://www.naaee.org/programs-and-initiatives/awards/outstanding-service-to-environmental-education-by-an-individual).

Figure 49. David L. Armstrong

As stated online, the person receiving the award must have made a significant contribution to environmental education in addition to one or more of the following:

- *Visible contributions in environmental education (e.g. research, innovations, curricula, legislation, publications, etc.)*
- *Dedicated service in the field of education*
- *Outstanding environmental action, contribution, or stance by a person whose primary function is not environmental (e.g. a politician supportive of education programs or legislation, etc.)*
- *Excellence in reporting environmental issues for the purpose of educating the public, in print or electronic media (e.g. a writer; newspaper, radio, or television program that regularly gives space or time to present environmental information in such a way as to educate over a period of time; or any network, foundation, or entity that makes such reporting possible)* (http://www.naaee.org/programs-and-initiatives/awards/outstanding-service-to-environmental-education-by-an-individual).

Armstrong was born August 6, 1941 in Hope, Arkansas, and was raised in Madison, Indiana. He attended Hanover College in Indiana, but graduated from Murray State University of Kentucky in 1966. He then earned a J.D. from the University of Louisville School of Law in 1969. Armstrong has worked in both the public and private sectors. He served as Jefferson County's Commonwealth's Attorney, and in 1983 was elected Attorney General of Kentucky. He ran unsuccessfully for Lieutenant Governor in 1987 (Wikipedia). Armstrong most recently has been appointed Chairman of the Kentucky Public Service Commission, within the Department of Public Service in the Environment and Public Protection Cabinet (Greenbaum Doll & McDonald PLLC 2008).

MAINTAINING THE FOREST

Numerous other people contributed to the success and value of the forest as a community resource, including but not limited to: Charlie Vettiner, Director of Jefferson County Playground and Recreation Board from 1946 to 1960s; George Probst, ranger from 1955 to approximately 1959; Dwayne “Cotton” Walker, Forest Supervisor in 1978; Steve Goodwin, ranger; Jack West, Assistant Ranger; and Kim Thompson, naturalist.

Many groups also have had a hand in building the forest into what it is today. Girl Scout Troop 116 built the Forest View Loop Trail through the Paul Yost Recreation Area that is now called the Mitch McConnell Loop Trail. Various Boy Scout troops spent many years maintaining the trails in the Horine Reservation Section. Paul and Mark Cox, as members of the Order of the Arrow and Assistant Rangers, cleared fire breaks during their summer vacations. Other times, as ones who knew the forest terrain so well, they were involved in search and rescue operations when a hiker became disoriented or a horse became spooked or stung by a bee (Paul Cox, personal communication 2008). During the time Wilderness Jefferson County Organization helped to maintain the forest, much of the work was volunteered. In addition, youth were paid through 1987 and 1988 with funds through the Job Training Partnership Act. During these years, much effort went into fighting a proposed logging road and into dealing with damage from horse riders that originated from new stables located along the JMF perimeter (Deitel 1988).

Wilderness Jefferson County Organization

In addition, numerous organizations assisted the forest with maintenance as well as acquisition activities. These include the local chapter of the Sierra Club and Wilderness Jefferson County Organization. Charter member Kenny Karem provided the following summary of their contributions to JMF:

> Dr. Fred Pipkin started the organization in 1975 after he had explored the 6 isolated parcels of the forest and proposed that county government and MetroParks purchase land to connect the tracts, preserve it as a wilderness, buy more land to create a wilderness green space and build trails for passive recreational use. At that time, the forest was composed of about 1500 acres and was largely ignored except for Tom Wallace Lake and the Forest View picnic shelter areas. Nobody bothered to explore the forest itself. A coalition organization of environmental groups was formed at a meeting at the MetroParks office. Fred Pipkin and Kenny Karem (charter member) have met with every Jefferson County Judge (and MetroParks directors) since Todd Hollenbach, and Mayor Jerry Abramson asking their support for this plan. Without the leadership of Wilderness Jefferson County and the support of key MetroParks personnel such as park planners Linda Penley and Anita Solomon and Director Robert Kirchdorfer and others, there would have been no expansion of the forest.
>
> Wilderness Jefferson County worked on the preservation plan for the forest which was enhanced by County Judge Mitch McConnell's administration. We have laid out and helped build almost all the trails in the forest (including Mary Sands and the Girl Scouts building the Forest View tracts, the Siltstone Trail (plotted by Fred Pipkin), the Miller Tract Loop (plotted by Kenny Karem) and the Tulip Tree Trail (plotted by John Knouse). All of this required thousands of hours of volunteer labor—exploring every foot of the forest and marking and making maps, marking trees and trail construction. Wilderness Jefferson County also raised funds for tract purchases, published a trail guide, provided patches for completing trail hikes, led hikes and backpacks for the public to learn about the forest, had countless meetings with park planners, wrote many letters seeking funds and worked with numerous government officials to support the project. We even had several garbage dump cleanup projects where we hauled out hundreds of rubber tires, stoves and assorted trash (up hills).

> At our request, the McConnell administration developed a very good initial study and plan for the forest. Herb Zimmerman (of Wilderness Jefferson County) persuaded the National Audubon Society to declare part of the forest an Audubon Sanctuary. Seeking the help of the Ky. Nature Preserves, Kenny Karem led two state botanists to the most pristine part of the forest (and later with MetroParks director Brigid Sullivan) which they studied and included in the current comprehensive master plan. Fred Pipkin and Kenny Karem met with Ms. Sullivan and asked her to sponsor the aforementioned master plan—which she enthusiastically did. John Knousse (of Wilderness Jefferson County) spent many hours researching maps and deeds to compile a list of desirable properties and draw many initial maps.
>
> Wilderness Jefferson County has watch-dogged the forest, protesting when paintballers were allowed in pristine parts of the forest to shoot guns, play games and dig foxholes. We objected when horseback riders rode on new hikers' trails and caused destruction. (There [were] designated trails for horses in the forest view area). We helped formulate rules for protecting the forest and nudged county government into helping create a plan to keep the forest clean. We met with mountain bikers to help them develop a bikers' route in the heavily-used Horine tract. We spent many hours working on forest rules and regulations and plans for a nature center (trying to keep out tourist lodges which would heavily impact the forest) and environmental education programs. We developed slide shows to educate the public and gave numerous talks. Several of us were part of County Judge Dave Armstrong's forest committee which developed a detailed plan for the forest in 1991.
>
> A few years ago, new MetroParks Director Mike Heitz and Metro Cabinet member, Mary Lou Northern, asked Kenny Karem to meet with them and review the history, progress and future of the Jefferson Country Forest, asking for suggestions. He presented a committee list of suggestions at that time.

Suggestions such as Mr. Karem's are still valued. Without organizations like Wilderness Jefferson County, the forest could not have been restored and cultivated as it was throughout the 1970s, 1980s, and 1990s.

Boy Scouts of America

The Old Kentucky Home Council, now the Lincoln Heritage Council, of the Boy Scouts of America spent 24 years as trustees of the Helen and Emmet F. Horine Reservation. During this time, they spent many hours maintaining trails and, in particular, the Horine Cemetery within this section. Also during this time, many area youth were able to develop leadership, teamwork, and survival skills; enjoy the camaraderie of their troop and other troops; and develop values of stewardship of the environment.

Having access to such an environment as JMF had an exceptional impact on many of the youth throughout Jefferson and Bullitt counties—Girl Scouts as well as Boy Scouts. Today, authors such as Richard Louv voice concern over the amount of time children sit inside with the TV or the computer. In his book, *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*, Louv advocates more time for children to experience nature, especially in the form of freedom to make forts and explore forested areas. Not only does this experience build

confidence, but it can also increase a child's ability to concentrate and focus (Louv 2005). During the years the Horine Reservation functioned as a scout camp, many in the area were fortunate to have such experiences (**Figure 50**).

Figure 50. Boy Scouts active at the Jefferson Memorial Forest. Photo on display at the Mt. Holly Video and Fun Zone. Courtesy of Kristen Caple Shockley.

Interviews with former scouts in the area such as Paul Cox from Fairdale Troop 210; Scoutmaster Joe Rich from St. Martha Parish Troop 194; and Dave Withers, an Eagle Scout from St. Martha Parish Troop 194 provided wonderful information about what being a scout at JMF was like. During his time as a Boy Scout, Paul Cox, his brother Mark, and his father Alan, one of the scoutmasters, would come to the Horine Reservation on a long weekend once a month to work on merit badges. Richard Shacklette, John McQuillen, Hudgeons, and Sonny Gans were other scoutmasters with the Troop 210 from Fairdale who had much influence on the success and development of the scouts. In particular, Mr. Shacklette and Ranger Steve Goodwin were remembered as instrumental in the success of the programs (**Figure 51**).

One of the most significant badges of yesteryear was remembered by Dave Withers. When his father was a scout, the most highly respected badge was the Wood Badge. The Wood Badge required more extensive preparation than other badges, including approximately six months of weekend efforts. Acknowledged by wooden beads worn around the neck, the Wood Badge demonstrated "a deeper commitment to scouting" (Dave Withers, personal communication 2008). The badge includes an emphasis on leadership and knowledge of the scouting organization. More information about the Wood Badge can be found at http://www.woodbadge.org/.

Figure 51. Many scouts remember Ranger Steve Goodwin and his dog, Alex (Hill 1992, photo by Pam Spaulding). ©The Courier-Journal

During their weekend at the reservation, scouts would arrive and settle into one of the camping areas---areas that had names such as the Pines, Maples, or White Birch. Those that arrived earliest could obtain the best spots—those that surrounded the Parade Field so the walk in the early mornings would be shorter. The Pines was remembered as desirable because of the soft bed of needles and quiet atmosphere. The rest of the time was spent on tasks associated with obtaining a merit badge or completing maintenance tasks such as clearing trails or maintaining the Horine Reservation Cemetery.

At times, District campouts would be held that included hundreds of scouts. Not only was there a parade ground, but also a Keystone Lodge, Ranger Station, storage and sawmill pole barns in the Horine Reservation that are not there any longer (see below in the Historic Structures section). Paul Cox remembers the strenuous hikes up from the bottom of the steep hillsides back to camp. As one of the older scouts, he and others would haul their equipment up to the campsite, but then have to return downhill to help the younger scouts—sometimes carrying the scouts as well as their gear.

Girl Scouts of America

The JMF was the playground of many troops of Girl Scouts as well as Boy Scouts. Many former Girl Scouts undoubtedly remember their participation in the day camps that took place at the Jones Hollow area of JMF. Jones Hollow, located off of Holsclaw Hill Road, was formerly the Forest View Section and is now the Paul Yost Recreation Area. The day camps took place during the summers, with each group participating for a week. Boy Scout Paul Cox remembers the Girl Scout camp--particularly one dark summer night. Although mostly just a day camp, this one spooky night, some Boy Scouts became quite unsettled by screams coming from the direction of the camp. Thinking the Girl Scouts were in trouble, they went to investigate. What they found put some red in their cheeks—a sign of their embarrassment. The screams were from the wandering peacocks that the Horines had once owned, not the Girl Scouts. It took quite awhile to live that one down.

Victoria Caple Kaelin also remembers those days well; as her mother was the director, she participated often. “Too old to be a camper and too young to be a counselor”, she nonetheless had many jobs to do, including clearing the camp of the many copperheads. A big stick and a hatchet were essential tools during those summers. Other jobs included teaching the younger scouts skills pertinent to scouting such as building campfires and using pocket knives. During their stay at the camp, the Girl Scout troops completed many maintenance tasks in addition to snake patrol. As mentioned previously, Girl Scout Troop 116 built the Forest View Loop Trail through the Paul Yost Recreation Area.

POLICING THE FOREST

Rugged topography, isolated ravines, sparse population, and—in the past—poor roadways have worked to keep the area that was to become JMF isolated from the developments of neighboring areas. As with other rugged landscapes, JMF has had a reputation as a region where nefarious activities were thought to occur. Additional investigations—including the collection of local oral histories—should be able to shed light on how much of this reputation is based on truth and how much is concocted to dissuade higher numbers of visitors. Activities considered illicit or unsavory believed to occur in the JMF areas include dumping of a homicide victim, moonshine stills, marijuana patches, and illegal dumps.

Moonshining in Kentucky has a rich as well as notorious history. According to David Maurer, author of *Kentucky Moonshine* (1974), as Scotch-Irish immigrants entered Kentucky, they brought with them two important traits that aided the development of a moonshining subculture: knowledge of distilling and a resistance to governmental regulation. Consequently, Kentucky provided:

> *adequate limestone water supply, preferably from a spring or group of springs; rugged, wooded terrain permitting adequate camouflage, and a population sparse enough to assure privacy. …Much of the land here was fertile enough and the climate favorable enough to grow more corn than was needed for food and livestock…The topography of the knob country and the mountains provides innumerable places where the location of small stills can be kept secret. And the sparse settlement characteristic of pioneer days remains so in comparison to other parts of the country* (Mauer 1974:52).

Much folklore and folk knowledge surrounds the craft. The folk knowledge encompasses a lot of aspects. Knowledge includes not only specifics about supplies but also the knowledge about how to hide the still and distribute its products. The locations of the best springs to use might be passed down through generations. The correct techniques to use so as to not "puke the still" had to be learned. The best equipment had to be made or obtained then transported to the still site—not an easy feat in rugged topography such as the knobs. Raw materials such as corn and sugar had to be surreptitiously gathered and also transported to the still site; the percentage of each for the "right" flavor had to be judged. In addition to folk knowledge such as this, there is also much folklore and mysticism about the process. Maurer (1974:xv) explains:

> *From prehistoric times, the processes of fermentation and distillation have been regarded as mysterious—supernatural forces being called upon to protect all phases of production, especially the still and its contents. It is not uncommon even today to find moonshine stills protected by juju charms, ranging from dead turtle or other reptile hung at the site to carefully-fashioned manikins…*

Maurer documents additional folklore elements surrounding the moonshining craft, including terminology derived from eighteenth century British Isles. "Backing", used to describe distillate at the end of the run, appears to be a term that came from the flax industry (Maurer 1974). Other terms in the argot of moonshining also hearken back to the Old World.

Moonshining activities were documented in the nearby Wet Woods area by John Jacob Niles. During his fieldwork between 1905 and 1936, Niles collected ballads sung by Kentucky and/or African American groups, including the Mulleneoux family from the Wet Woods (Niles 2000). At the time of the fieldwork, Pete Mulleneoux was 75 years old, and Niles notes that in addition to his performances,

> *a small portion of Mulleneoux's income came from the manufacture of homemade whiskey. His best customer was the owner of the tavern at the crossroads, a few miles away [known as Benny Benkirk's saloon]. The tavern-keeper had a cunning way of retailing the Mulleneoux distillate. Bottles of this product were kept in a gunny sack, submerged in a pond just behind the tavern building. A rope on the sack was attached to a homemade derrick. This was nothing more than a long pole mounted on a fence post: when one end was depressed, the other end came up and could be swung around to the edge of the pond. Then the bottles containing Mulleneoux's highly desirable drink could be removed from the dripping gunny sack and brought into the tavern. When a customer appeared at the tavern and expressed a preference for the homemade product, the keeper would say to his assistant, "Oppie, take a walk." This was the signal for the recovery of a pint. But if the keeper said "Oppie, take two walks", Oppie came back with a quart* (Niles 2000:105).

Moonshining had also been a profitable activity in JMF at one time. Charlie Vettiner remembers: "during Prohibition, when I was a teacher at Fairdale, I could look out of my second-story classroom window and see the smoke rising from two stills up in those hills" (Sinclair and Brong 1965). Other informants have also verified its existence in the forest. Across the state, the popularity of moonshining grew after Prohibition (1919) and reached its greatest popularity during the 1950's (Maurer 1974). Over the last half of the twentieth century, however, its popularity has declined. Archaeological evidence of still locations in JMF might include areas of charcoal, copper tubing or other copper parts, parts of vats or barrels, and possibly parts of charms.

Other illicit activities have occurred at JMF over the years as well, including marijuana cultivation that were discovered as trails were cut in. More recently, those traipsing through the woods for scouting activities, archaeological survey, or geocaching games must be aware of the remains from drug manufacture as well. Refuse such as gasoline cans left from illicit activities such as these can be explosive if not handled correctly.

Finally, the forest has had a reputation for many dumping activities. In past years, employees such as Larry Slack did much of the cleanup. In a 1992 *Courier*-Journal article, he stated "…this is the best job I've ever had. When I see something dumped in there I clean it up like it was my own home. We all feel that way" (Hill 1992). The problem also plagues area residents, who are often the ones to pitch in and clean roadways up (LouisvilleKY.gov website 2008). Organizations like the Boy Scouts and Wilderness Jefferson County Organization have also done a huge part of the cleanup of the forest.

The dumping problem has been difficult to manage, however. Dumps include not only roadside litter and used tires, but also industrial wastes such as that associated with Valley of the Drums summarized previously. Homicides have even occurred within JMF, such as the 1962 case that occurred in the Forest View area. As at most parks, policing these activities must be a high priority.

4
Existing Conditions

PREHISTORIC RESOURCES

The JMF lies within the Salt River Management Area of Kentucky as defined by Pollack (1990). Counties included in this management area are Jefferson, Bullitt, Meade, Hardin, Larue, Nelson, Marion, Boyle, Mercer, Spender, Anderson, Shelby, and Oldham. As of the 1990 publication, 72.8 percent of the sites within this management area were open habitation sites, two of which included mounds. Other major site types included workshop (n=34), rockshelter (n=28), earth mound (n=27), stone mound (n=20), isolated find (n=16), and cemetery (n=16).

Previous Archaeological Investigations within the JMF

Only two professional archaeological investigations have been conducted within the Jefferson Memorial Forest (**Table 15**). The first of these was done in October and November of 1981 by the University of Louisville Archaeological Survey (ULAS) (Wohlgemuth 1982). An interview with Dr. Joseph Granger who directed the ULAS at that time recalls the effort was a student project undertaken by Dick Wohlgemuth and Tom Boone. Wohlgemuth (1982) estimates that approximately 75% of JMF (based on the 1964 JMF boundaries) was subjected to surface (non-invasive) survey. Some of the areas examined were being impacted by timber management and logging. The survey included a simple visual ground surface inspection plus the excavation of test units. Field methods were described by Wohlgemuth as follows:

> *A crew of two carried out a pedestrian survey of Jefferson County Forest. The small size proved adequate to cover 1214.1 hectares due to the lack of flat surfaces (less than 15 degree slope) which existed within the boundaries of the Forest. The level areas where they did exist were usually used as park facilities (including a large lake) and heavily impacted. Only on scattered knolls and ridge tops were there any predicted areas for prehistoric habitation. These areas were tested by a minimum of two one-square meter test units each. A fire rake was utilized to remove humus and loosen root mass, then the unit was hand excavated by trowel…All chert material encountered was collected, returned to the lab, washed and examined to determine any manmade alteration….*

In addition, alluvial fans outside forest boundaries were also tested to provide necessary comparative data. Chert samples were also collected outside the Forest. These samples were examined and described with regard to color, mottling, inclusions, and quality. Experiments to document knapping quality and heat treatment alteration were conducted and reported. These are summarized in **Section 2** of this report.

Fourteen field sites were discovered during the survey; nine of these were formally recorded as archaeological sites with the Office of State Archaeology. The remaining five were isolated finds. The nine recorded sites were designated sites 15JF522 through 15JF530. One of the nine sites, 15JF524, appears to be located on private property. Most of the sites were located on

ridgetops and were classified as small prehistoric lithic scatters of undetermined age. They were interpreted as workshop sites where Muldraugh chert was quarried and initially reduced. Muldraugh chert is readily found in the bedrock outcrops and streambeds of the Knobs within the Forest. It was a prime raw material during Middle and Late Archaic times. These sites are discussed in more detail in the section below on archaeological sites.

Table 15. Previous Surveys and Sites Identified in the JMF

Survey	Site	Summary	Material Recovered
University of Louisville Archaeological Survey (Wohlgemuth 1982)	15JF522	lithic scatter on alluvial fan, 10 x 30 m in size	8 Muldraugh Mottled flakes, 1 Harrison County flake
	15JF523	ridgetop lithic scatter, 30 x 30 m in size	87 Muldraugh Mottled flakes, 1 Muldraugh Coquina
	15JF524	historic as well; might be on private property, located on alluvial fan, 10 x 20 m in size	12 Muldraugh Mottled flakes, 5 Muldraugh Coquina
	15JF525	ridgetop lithic scatter, 30 x 40 m in size	122 Muldraugh Mottled flakes
	15JF526	ridgetop lithic scatter, 50 x 70 m in size	158 Muldraugh Mottled flakes, 2 Muldraugh coquina
	15JF527	ridgetop lithic scatter, 30 x 30 m in size	13 Muldraugh Mottled flakes, 2 Muldraugh Coquina
	15JF528	ridgetop lithic scatter, 20 x 40 m	15 Muldraugh Mottled flakes
	15JF529	ridgetop lithic scatter, 30 x 50 m in size	43 Muldraugh Mottled flakes, 4 Muldraugh Coquina
	15JF530	ridgetop lithic scatter, 20 x 20 m in size	30 Muldraugh Mottled, 2 Muldraugh Coquina, 1 Harrison County
	isolates (Field Sites 1, 3, 4, 6, and 7	Field Site 1 located on alluvial fan	one biface of Muldraugh Mottled
Kentucky Archaeological Survey (Stottman 2006)	no sites encountered		

The second survey was conducted in 2005 for the Churchman Tract by the Kentucky Archaeological Survey (KAS) (Stottman 2006). The area examined encompassed 24.3 hectares (60.5 acres). The Churchman Tract is located along Blevins Gap Road and Cane Run. The survey included visual ground surface inspection and shovel probing. Only six artifacts were discovered; these were all clear or brown glass of recent origin. Although collectors and residents reported finding artifacts in the area, none were discovered during the survey by KAS.

Archaeological Sites within the JMF. Only eight archaeological sites have been recorded with the OSA on forest property (**Appendix A**, **Figure 85** through Error! Reference source not found.). These were all found during the 1981 student project by the University of Louisville Archaeological Survey.

Site 15JF522 (JCMF-2) is located on a finger ridge. In 1981, it was noted that it had been impacted by a logging road. The site size was estimated to be 10 x 30 m in size and yielded only a few chert debitage, including 8 flakes of Muldraugh Mottled material and 1 flake of Harrison County material. It was interpreted as a low-density prehistoric lithic scatter with little to no archaeological significance.

The survey of site 15JF523 (JCMF-5) revealed a prehistoric lithic scatter that produced 80 debitage across an area that measured approximately 30 by 30 meters. It was situated near a knoll top in a sheltered valley with a southern aspect overlooking Brier Creek. Artifacts were recovered from the surface and at depths below surface within test excavations. The site was found to be heavily disturbed by logging. The assemblage included 87 Muldraugh Mottled flakes and 1 Muldraugh Coquina flake.

Site 15JF524 (JCMF-8) was located at the base of a knob on an alluvial fan or footslope at the entrance to Tom Wallace Recreation Area. The site overlooked Bee Lick Creek. There was a four-meter scalp from the level area of the site to the creek bed. The site measured approximately 10 by 20 meters in size. A sparse scatter of prehistoric lithic debitage was found along with some historic construction debris including nails, brick, and glass. Debitage included 12 flakes of Muldraugh Mottled and 5 flakes of Muldraugh Coquina. Test units revealed a shallow plowzone 10 to 15 cm thick. All of the artifacts were contained within the plowzone. The site was considered to have low research potential. However, there is no indication that any archival research was conducted to learn if the site was the former residence of an early landowner. This site appears to be located on private land very near the forest boundary.

Site 15JF525 (JCMF-9) was located on a ridgetop where the ridge spur connects to the main ridge system. The site faced northeast overlooking Rearden Hollow some 100 feet below. The soils at this site were deep, dark, and rich with no gravel inclusions to a depth of 30 cm below surface. The site was manifest as a prehistoric lithic scatter that measured 30 by 40 meters in size. A total of 122 debitage was recovered—all of Muldraugh Mottled material. Regardless of the frequency of recovered artifacts, the site was found to have low research potential.

Site 15JF526 (JCMF-10) was also located at a ridge intersection, in this case overlooking Brier Creek valley. The site area was nearly level at the top of the ridge, but the area was restricted to a small surface area. The soils were moderately deep. This site was bisected by a logging trail, facilitating ground surface visibility. The site investigation revealed prehistoric chert debitage to a depth of 10 cm below ground surface. A total of 160 debitage were recovered, including 158 Muldraugh Mottled flakes and 2 Muldraugh Coquina flakes. The site was interpreted as a lithic workshop locus where the valuable Muldraugh chert was procured and initially reduced. The site was, however, considered to have low research potential.

Another chert procurement and reduction site was discovered on a nearby ridgetop where a spur intersects the main ridge line. Site 15JF527 (JCMF-11) contained deep soils in excess of 25 cm. Prehistoric debitage was discovered to a depth of 11 cm in test excavations. Fifteen debitage were recovered from an area that measured 30 by 30 meters. Thirteen of these debitage were Muldraugh Mottled; two were Muldraugh Coquina. As with the other sites identified during this project, the site was found to have low research potential.

Site 15JF528 (JCMF-12) was also a locus for procuring and reducing Muldraugh chert. This site is a low-density prehistoric lithic scatter restricted to a small area that measured 20 by 40 meters. The 15 recovered artifacts were confined to the upper 8 cm of soil. The site was

situated on a ridgetop where an east-west trending ridge spur intersects the main ridge system. The site was considered to be insignificant in terms of its potential to yield meaningful new data.

Site 15JF529 (JCMF-13) was also a prehistoric lithic scatter. The investigation of this site yielded 47 debitage recovered from an area that measured 30 by 50 meters. Chert types included Muldraugh Mottled (n=43) and Muldraugh Coquina (n=4). The material was recovered from a flat, northeast-southwest trending ridgetop. The site was bisected by a footpath that doubled as a fire access road. The site was interpreted as a lithic procurement/early reduction site, and was not considered to be significant.

The final site, 15JF530 (JCMF-14), was yet another prehistoric lithic procurement/early reduction locus. The investigation of the site yielded 33 debitage collected from a flat ridgetop. Site size extended 20 x 20 m. Chert types included Muldraugh Mottled (n=30), Muldraugh Coquina (n=2), and Harrison County (n=1). Although the site had deep soils, the artifacts were restricted to the upper layers. The site was not considered to be archaeologically significant.

Unrecorded Archaeological Sites within the JMF. The locations of several archaeological sites in the JMF are known by collectors and avocationalists. One of these lies along Bearcamp Road (**Figure 52**). This site lies on a small parcel of flat land on the floodplain of Bearcamp Run. Late Archaic stemmed McWhinney projectile points and thermally altered bifaces have been found in the streambed and adjacent eroding banks (**Figure 53**). This is a popular site for collectors.

Figure 52. View of unrecorded archaeological site located along Bearcamp Road.

Figure 53. One example of prehistoric artifacts recovered from the unrecorded site.

Another site is reported to be situated at the height of Miller Hill in the Scott's Gap section of the forest (Error! Reference source not found.Error! Reference source not found. and Error! Reference source not found.).The precise location needs to be verified with GPS readings, because it appears to lie very close to the forest boundary and may in fact be on private land. The site is a large prehistoric quarry bisected by the Scott's Gap Loop. The chippage, broken bifaces, and other by-products of prehistoric stone tool manufacture litter the ground in this hilltop location.

Figure 54. View of prehistoric quarry site at Scott's Gap.

Figure 55. Closeup view of lithic debitage on ground surface at Scott's Gap prehistoric quarry site.

A known but potentially very significant archaeological site is indicated on mapping on file at the Historic Landmarks and Preservation Districts Commission (HLPDC). This mapping appears to be related to a specific although unidentified study, and highlights an area along Bearcamp Road in the Brier Creek Valley on the west face of Jefferson Hill that is said to contain a Native American burial ground (**Figure 56**). The source of this information is still being researched. The area lies in a broad flat valley dotted with modern residences and farms. The precise location of the burial ground is not indicated on the mapping.

Figure 56. Views along Bearcamp Road.

There are undoubtedly numerous other archaeological sites within the JMF, both prehistoric and historic. Mapping obtained from the Historic Landmarks and Preservation Districts Commission indicates numerous now demolished historic structures. The below-ground resources that once surrounded these structures are likely to be present and still largely intact. These sites should be recorded as archaeological sites. Prehistoric sites are in all probability present in any of the relatively level areas along the streams as well as situated on the ridgetops where Muldraugh chert could have been available and quarried by the local Native Americans. Full-scale survey is required to locate and identify these sites.

Previous Archaeological Investigations in Surrounding Areas

Table 16 presents information on the various surveys conducted in areas surrounding the JMF. The surveys include Section 106 projects such as the development of Interstate 265, surveys of comparable forests such Otter Creek Park and Bernheim Forest, and the Integrated Cultural Resources Management Plan (ICRMP) for Fort Knox.

During survey of the widening of Dixie Highway to West Point, Hoehler (1971, in Granger, DiBlasi, and Braunbeck 1976) documented 48 sites, including the Mill Creek Site. The Mill Creek Site produced evidence of use during multiple periods, but the occupations appeared to be short and the deposits appeared disturbed from the migrations of the Mill Creek channel.

Prior to the construction of the Interstate 265 (Gene Snyder Freeway, previously the Jefferson Freeway), a reconnaissance of cultural resources was completed by the University of Louisville Archaeological Survey (Granger and DiBlasi 1975). The survey encompassed 29 miles from northwest of Louisville around to the southeast and to the southwest. Over this range of landforms, 38 sites were identified. Twenty-three of these sites were located north of the JMF, along the proposed right-of-way between Dixie Highway and the National Turnpike. Although most of these were prehistoric lithic scatters with no cultural assignment, four sites in this section were recommended for further testing. Site 15JF138 was an Early or Middle Archaic site that extended 120.2 x 75 m. The inventory of artifacts included 226 debitage, 10 blanks, 3 blades, and a Kirk Corner-notched projectile point/knife. Site 15JF142 extended 20.7 x 27.1 m; its inventory included 112 debitage and a few bifaces. Site 15JF143 extended 44.5 x 49.1 m; its inventory included scrapers, 168 debitage, a Mississippian or Frazier projectile point/knife, and a Big Sandy projectile point/knife diagnostic of the Early Archaic period. The inventory of Site 15JF144 included bifacial and unifacial artifacts as well as 26 debitage; its size extended 27.1 x 31.4 m. In addition, Site 15JF214 was not recommended for testing since the chosen alignment did not impact it. The inventory of 15JF214 included diagnostic artifacts from the Early Archaic (Big Sandy), Late Archaic-Early Woodland transition (Motley), Early Woodland (Adena), and Mississippian periods.

Further upstream along the Ohio River floodplain, Granger and DiBlasi (1975, in Granger, DiBlasi, and Braunbeck 1976) evaluated cultural resources within the proposed Riverport Industrial Park. During this survey, 29 sites were identified. Cultural groups that had used the property in the past included groups from the Mississippian to the Archaic periods. Based on the data recovered, Granger and DiBlasi made two conclusions that may hold true for other areas: 1) second terraces were locations chosen by peoples of later periods as the location for their larger villages; and 2) the rises along Mill Creek were chosen by multiple groups over many temporal periods, but occupations were of short duration and focused activity.

Table 16. Previous Archaeological Investigations in Surrounding Areas

Survey	Sites	Summary	NRHP Recommendation
Dixie Highway Extension (Hoehler 1971, in Granger, DiBlasi, and Braunbeck 1976)	Mill Creek Site (15JF206)	Late Archaic	
An Archaeological Reconnaissance of Jefferson Freeway Sections 1-6, 9 and 10, Jefferson County, KY (Granger and DiBlasi 1975)	38 sites and 1 locality overall, 23 near JMF	Early Archaic through Mississippian	six sites potentially eligible, including 4 near JMF 20 sites-monitoring 10 sites-no further work
An Archaeological Reconnaissance of the Jefferson Freeway Connector/Extension, Jefferson County, KY (Granger, DiBlasi, and Braunbeck 1976)	15JF15	Spadie Site Middle-Late Archaic (Big Sandy PPK)	nominated to NRHP
	15JF339	Woodland (Steuben PPK)	No further work with chosen alignment
	15JF324 15JF328 15JF337 15JF338 15JF340	prehistoric lithic scatters, no cultural assignment	No further work
Riverport Industrial Park (Granger and DiBlasi 1975, as summarized in Granger, DiBlasi, and Braunbeck 1976)	15JF306 15JF327 15JF331	Mississippian	
	15JF311	Early Woodland	
	15JF316 15JF325	Adena	
	15JF322	Late Archaic-Early Woodland (Motley)	
	15JF323	Archaic Mississippian	
An Archeological Survey of Bernheim Forest, Bullitt and Nelson Counties, Kentucky (Claggett 1976)	8 prehistoric sites		
A Survey of Archaeological Sites in Otter Creek Park, Mead County, Kentucky (Hale 1981)	47 prehistoric sites 16 historic sites	hiatus during Middle Archaic, all other periods represented	not assessed
Fort Knox ICRMP 2001	733 sites	447 prehistoric 245 historic 41 unassigned	233 not assessed 6 NRHP eligible, recommended, or presently NRHP 387 not eligible
Phase I Archaeological Investigations of 249.55 Hectares (616.65 Acres) at U.S. Army Garrison Fort Knox, Bullitt and Hardin Counties, Kentucky. (Striker 2006)	15HD689 15HD690 15HD691 15HD692	prehistoric and historic scatters, no prehistoric diagnostics	not eligible

During archaeological reconnaissance of the proposed Jefferson Freeway Connector/Extension, Granger, DiBlasi, and Braunbeck (1976) discovered 5 prehistoric sites. All were prehistoric sites located upon natural levees of the Ohio River. Only one site, 15JF15 (known as the Spadie Site) was within the preferred alignment; it was also the only site recommended for NRHP nomination. Diagnostics recovered during this survey included a Big Sandy projectile point/knife, which suggested a date between 3500 and 1200 B.C. Due to the value of data and the threat of further development, a Mill Creek Archaeological District was proposed.

Archaeological resources within Otter Creek Park were evaluated in 1980 and 1981 by the University of Louisville Archaeological Survey (Hale 1981). Within the 3,000 acres, 47 prehistoric sites were identified. Data from the survey suggest that Otter Creek Park was inhabited during all prehistoric periods except one: the Middle Archaic. The reasons for this hiatus could not be identified during the survey. Site types identified include rockshelter and open habitation sites. Of the open habitation sites, most were ephemeral lithic scatters on ridgetops. One, however, was a Mississippian house site with wattle and daub present. Historic resources were evaluated by Otto and Gilbert within the same volume. They include the vanished town of Rockhaven at Piomingo Bend, cemeteries, a cave that John Hunt Morgan's Raiders used during the Civil War, and ruins of dwellings, springhouses, barns, and mills.

In 1976, Stephen Claggett completed a survey of 4500 ac of Bernheim Forest at the behest of Mr. Henry Offutt and Dr. Donald Janzen. Eight prehistoric sites were identified; site types include rockshelter and open habitation sites. Few diagnostics were recovered, but Archaic and Woodland groups were represented. The sites were interpreted to represent loci of a seasonal landuse pattern. Sites in Bernheim most likely functioned as fall/winter extractive camps. Historic sites included dwellings, well casings, and outbuildings. Evidence of the salt trade and iron industry was expected but not encountered. Comparable industries would be expected at JMF.

The Integrated Cultural Resource Management Plan for Fort Knox was completed in 2001. The survey identified 733 sites containing 820 possible components. Prehistoric site types included open habitation sites (n=354), mounds or mound complexes (n=46), workshops (n=32), quarries (n=12), rockshelters (n=2), and an isolated find (n=1). Of the prehistoric cultural deposits that could be attributed to a cultural period (n=174), most represented were Late Archaic (32%), Early Woodland (22%), Early Archaic (14%), Middle Woodland (9%), and Middle Archaic (7%). This pattern suggests populations became denser during the Early Archaic, peaked during the Late Archaic period, then moved on after the Middle Woodland period. Additional components identified included Early Paleoindian, Late Woodland. Historic site types included farm/ residence (n=206), industrial sites (n=9), military sites (n=3), and other (n=27).

In 2006, Gray & Pape completed a Phase I survey of 249.55 ha (616.65 ac) at Fort Knox. Although the terrain was similar to that along Cedar Creek and Pennsylvania Run where significant Middle to Late Archaic resources have been identified, no significant resources were encountered during the survey.

Prehistoric Summary

The JMF contains a mosaic of resource communities that indigenous populations may have sought. The presence of these groups and their use of the various resources provide valuable data that will contribute to research questions pertaining to the Falls of the Ohio as well as the movements of these cultural groups across all of Eastern North America.

The geological resources were one of the most important reasons cultural groups would have explored JMF. Rockshelters might have been sought out for living quarters, possibly during a seasonal round of landuse. Most likely this would have been in winter. All cultural groups have been documented to use rockshelters, but of particular note are the Early Archaic groups that used them for interment such as at 15BU236. These unique persistent places not only afford slices of insight into many different cultural groups, but also, due to their unique preservation, hold the key to past behavior that no other site type can provide. Material types that do not survive in other site types, such as bone, antler, grass, and even coprolites survive in rockshelter, thereby giving today's populations information about past diet, music, toys, clothing, tools, and ornamentation. Intact deposits within the rockshelters could provide valuable pollen and phytolith evidence for past climate changes as well, thereby contributing to the environmental history of JMF.

Another important geological resource to prehistoric populations was the material for their weapons and tools: chert. Found either as secondary sources within drainages or at the ridgetops from primary outcrops such as 15JF526 and 15JF527, Knobs/Muldraugh chert has been recovered through the region. Janzen (1971, in Granger and DiBlasi 1975) identified three chert types that indigenous populations might have sought in the Knobs region: 1) Knobs chert (Muldraugh), a mottled version; 2) silicified oolitic limestone; and 3) siderite chert from an iron-bearing formation, possibly the Borden formation.

The floral resources of JMF would have served as food, fuel, medicinal use, spiritual use, and as building material. These might have included the beech and maples of the Acidic Mesophytic Forest of the moist lowlands, the hickories and oaks of the Acidic Sub-Xeric Forest (mid-upper slopes), or the oaks and blueberries of the Acidic Xeric Forest on the ridgetops (Ecological Stewardship Services 1994). Another possible location prehistoric inhabitants may have sought out were places peoples today consider wasteland—the shale barrens. The prairie grasses and forbs could have provided unique resources for medicinal, spiritual, or subsistence uses. In fact, Delcourt and Delcourt (2004) suggest communities such as these were tended and intentionally propagated by fire and other horticultural methods. Unfortunately, as there are no Old-Growth Forest communities remaining within the preserve, we do not know all the possible resources available to indigenous peoples.

The faunal resources might also have been exploited for various uses, including for food, furs, spiritual, or tool uses. Resources that have been documented to be important to cultural groups in the area include deer, bear, raccoon, elk, and turkey.

Research questions regarding settlement and landuse patterns of various cultural groups within the Falls of the Ohio region may be addressed with new information from the JMF. For example, is there another cluster of Archaic sites in addition to those defined by Granger 1985 (Floyd's Fork, Beargrass Forks, Harrods Creek, and Mill Creek)? During the Middle Archaic, specifically, did populations shift to riverine locations and desert the upland sites, such as data from the Otter Creek survey suggest? Also, data from the Fort Knox survey suggest that over time, as inhabitants became more agricultural, they were more likely to settle in the larger floodplains (O'Malley 1980, in Hale 1981).

Given the topography of the project area, expected prehistoric sites include hillside sites such as rockshelters; ridgetop sites such as open habitation sites, quarries, fortifications, and workshops; and floodplain sites such as open habitation sites, mounds, resource extraction camps, or workshops. Although lithic scatters on ridgetop sites have been dismissed by the

ULAS (Wohlgemuth 1981) survey previously, other sites within the Knobs region have proven to be deeper and more significant than first evaluated (Knudsen 1988). Because the majority of the forest contains few floodplains and terraces, multi-component open habitation sites would be expected in the few floodplains such as along Brier Creek and Knob Creek. Granger and DiBlasi (1975) suggest the Blevins Gap (Cane Run Valley) was a major route of travel and communication between sites along the Ohio River and sites within the interior lowlands of the "Wet Woods" where KYANG, Lone Hill, and the Minor's Lane sites had been. Cultural influences within Jefferson Memorial Forest, on the other hand, might have traveled along routes through the Brier Creek and Knob Creek valleys from the Ohio River.

The Falls of the Ohio region is a unique blend of environmental conditions within which various prehistoric cultural groups lived. At various times, cultural influences have come from the southeast, downstream along the Ohio River from the north and east, and particularly upriver along the Ohio River from the south and west. Other traits may have been local innovation. Undoubtedly, as in later historic times, the Falls region served as a strategic political and economic locus. Additional information from the varied ecological landscapes of Jefferson Memorial Forest will improve the interpretations of these developments and reflect the contributions the Knobs region made to these broad trends.

HISTORIC RESOURCES

Early historic settlement of most areas usually occurs first along the streams and major transportation routes. Research into the communities that develop within road corridors and the characterization of the people who traveled on them through time can provide meaningful insights when developing a historic context. An understanding of the regional movement of people and goods is critical to the cultural landscape approach. For this reason, it is important that the study of even abandoned roads be integrated with those of extinct and living communities.

The distribution of residences along the major roadways can be readily seen on the 1979 Kentucky Transportation maps for Jefferson and Bullitt counties in the area of the JMF (**Figure 57** and **Figure 58**). For this reason, the following discussion of the historic – or above-ground – resources is organized according to the roadways present today in the forest. Where known, a distinction is made between those resources that are located within the boundaries of the JMF and those that lie outside, but in the vicinity of, the forest.

The majority of the historic structures that have been recorded with the Kentucky Heritage Council and the HLPDC within the forest have now been demolished. There are, in fact, few standing structures within the forest itself. These are now mostly used for forest administration and maintenance. Numerous structures in the vicinity of the forest have never been officially recorded with the state or county. Traditionally, the recordation of structures has targeted the large and stately residences of affluent individuals; structures associated with historical events of national or state significance; or very early pioneering buildings such as forts and stations. Simple rural vernacular architecture has been less often treated in historical county surveys. This has been changing in recent years. Still, many such homes and other commercial, community, and religious structures remain undocumented. Numerous examples abound in the JMF area on privately-owned properties (See **Figure 59** through **Figure 62**).

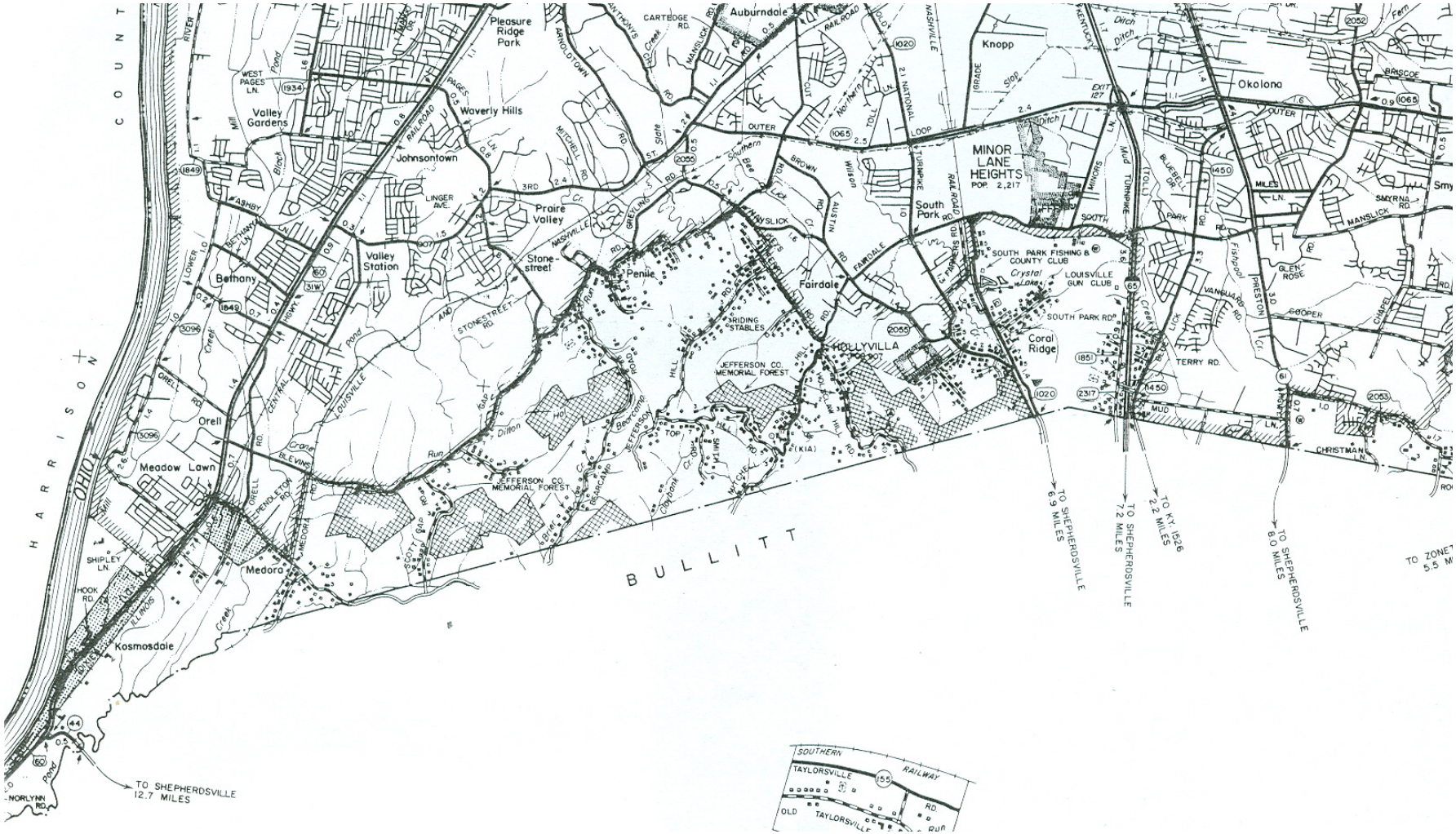


Figure 57. 1979 Kentucky Transportation map for a segment of Jefferson County.

Figure 58. 1979 Kentucky Transportation map for a segment of Bullitt County.

Figure 59. Structures along Holsclaw Hill Road.

Figure 60. Structures in the Fairdale and South Park area.

Figure 61. Large home along Bearcamp Road.

Figure 62. Residence along Mitchell Hill Road.

Blevins Gap Road

Blevins Gap Road extends from its intersection with Penile Road westward along the floodplain of Bearcamp Run, through Blevins Gap, to the valley of Cane Run. Numerous cultural resources lie along this route, including nine historic sites (**Table 17**).

Table 17. Historic Resources on Blevins Gap Road

Still Standing	Demolished
Penile Baptist Church (JF59)	JF53
JF54	2-story brick chimney and stone foundation
bungalow	
stone pillars at Scott Gap Road Intersection	
5401 Blevins Gap Road	
bungalow located near Pinguely Tract	
1875 house located west of Rieber/Valley Lake	

Outside Forest Property. Penile Baptist Church (JF59) is located at 2302 Blevins Gap Road. Previously, the church had been the Penile Church of the Nazarene. The example on Blevins Gap Road is a one-story, three-bay frame structure with 4/4 windows. The name is suspicious, particularly since a penal farm was once considered a possible use of the forest. The name, however, appears to have some meaning in the Baptist church, as there are Penile Baptist Churches from Chicago, Illinois to Blue Springs, Alabama. Perhaps it is a derivation of peniel, which means "I have seen a divine being face to face, yet my life is preserved" (Wikipedia 2008).

Right at Blevins Gap, HLPDC survey has identified a stone foundation and a 2-story brick chimney. No additional information on this house site has become available.

Historic property **JF54** is a log structure located along Blevins Gap Road. It is a single pen, one-story log house with half-dovetail notching. No fireplace had been built, but according to the most recent owner a brick chimney had at one time stood beside one wall. James M. and Bernice Bennett also recalled whitewashing on the outside walls and chinking of mud and wood. The logs, Bennett suspected, were of poplar. At the time of the survey, three boxcars had been attached to the walls to add living space. These have since been removed.

A **bungalow** is located at the intersection of Blevins Gap Road with Sawmill Lane. No additional information has become available.

Along Sawmill Lane, HLPDC files have documented a **log house, barn,** and **shed**. Mr. Bob Lamkin, a resident of the area, related that a sawmill had once existed on Sawmill Lane. No additional information has become available.

HLPDC documented stone pillars at the intersection of Blevins Gap Road. Their function and date of construction has not been determined. Their relationship to other stone pillars along Bearcamp Road has also not been determined.

Historic property **JF53** was a two-story log house located near the intersection with Scott Gap Road. The structure included a stone chimney with brick stack. Historic property JF53 was razed in 1986 and has been replaced by a “retirement colonial”. Farm ponds associated with the previous structure remain.

During the original survey of the area prior to 1800, the land had been owned by John May. John May, previously of Dinwiddie County, Virginia, has been called the largest landowner in eighteenth century America. His total land holdings in Jefferson County were granted November 16, 1781 came to 6,533 acres (2,643.8 hectares) (HLPDC Files 2008; Kentucky Secretary of State 2008) (**Figure 63**).

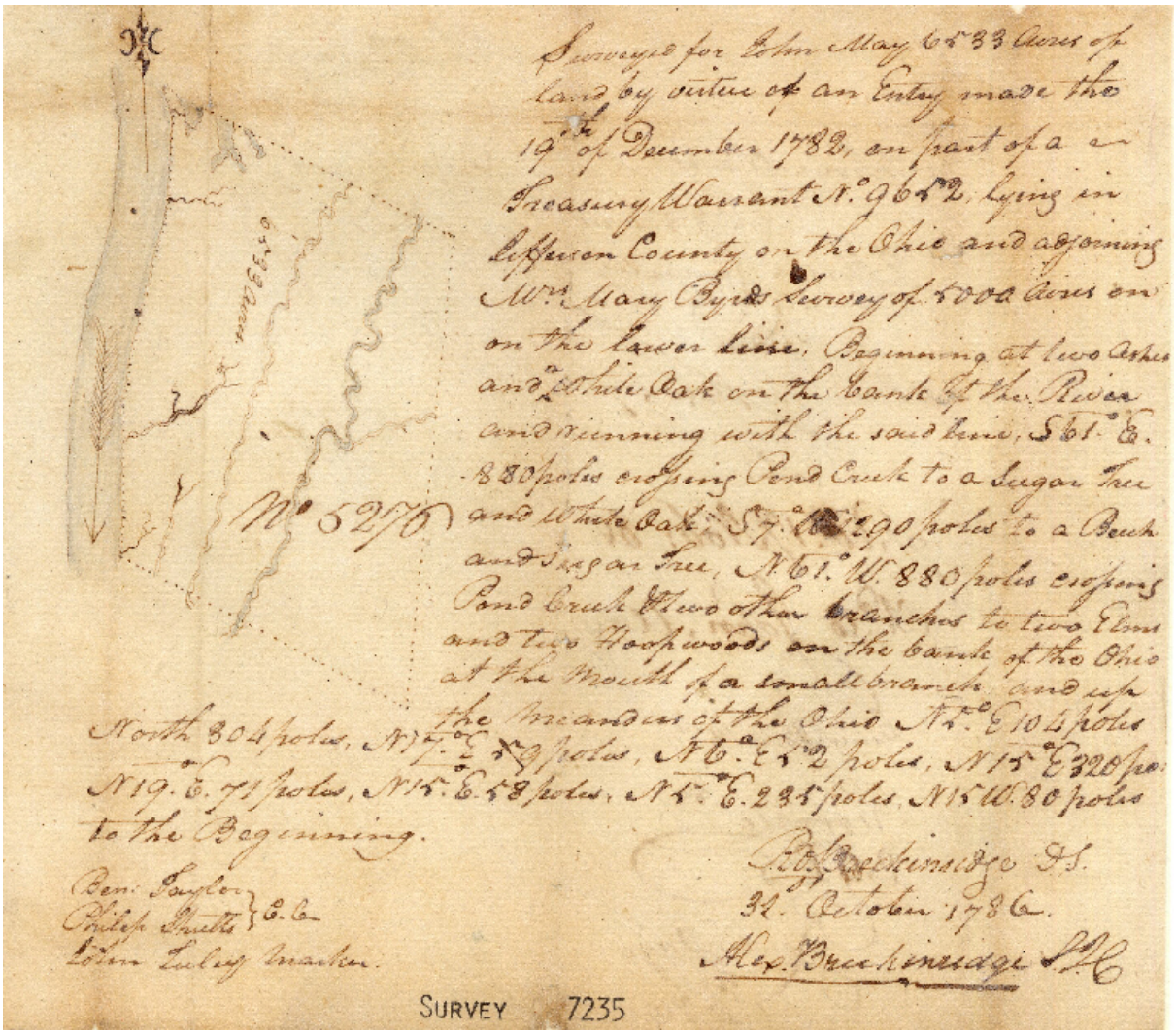


Figure 63. Copy of John May's Land Warrant.

The Blevins family built the original log home on this parcel between 1856 and 1858. The land upon which the log house stands was part of tracts associated with a tannery operated by William Maryman and Daniel Fetter, which reportedly lies off the property west of the Blevins House. Although no information on this tannery was available in HLPDC files, additional historical research and archaeological exploration in this area may turn up evidence of the tannery.

Other than brief references to Theodore J. Shaut's tannery in Ashland Kentucky (Kerr et al. 1922), little background information on tanneries in Kentucky could be gathered. A perspective on the industry may be gained from tannery sites in Indiana, Virginia, and Pennsylvania, however. The Rickenbaugh family operated a tannery at Celina, Perry County, Indiana, now located within Indian-Celina Lakes Recreation Area of Hoosier National Forest. Information regarding this operation was documented via public interpretation kiosk at the Rickenbaugh House. The Jacob Rickenbaugh tannery was located near two springs below his house. The house was built in 1874; the tannery was in operation by 1901. Archaeological evidence of the tannery may include the large number of vats used during the process, a structure housing the finishing vats, and a structure known as the "bark house" that stored the chestnut and white oak bark rolls. Vats included a number of wooden-lined vats located outside and approximately six finishing vats located inside a structure. The Rickenbaugh tannery was paid in cash or in a portion of the leather; type of hides used in the process appear to have been from livestock rather than wild sources—calfskins and sheepskins. The process took approximately nearly one year to complete and was arduous and odorous work. From the initial hair-removal procedures to the finishing vats, the work entailed transferring the heavy hides amongst the vats. Necessary ingredients included salt, lime, and potash. When finished, the leather was sold to customers as far away as Chicago.

The Waterford tannery site in Loudon County, Virginia was a family-run enterprise that operated from 1785 to approximately 1877. At Waterford, hides were cleaned, soaked in a caustic lime solution, then tanned using oak or hemlock bark (Waterford 2008). Archaeological evidence remaining from this tannery included pits from the soaking vats and—it was hoped--possible tannery shed remains. In contrast to the Waterford and Rickenbaugh operations, the Philipsburg tannery was a larger operation that operated from 1876 to 1912 in Centre County, Pennsylvania. The history and tanning processes associated with the tannery operations at Philipsburg may be found at the Philipsburg Tannery Website (2008). Included are pictures of artifacts associated with the industry, such as wooden vats, metal tongs, and metal draw knives.

Tanneries were valuable industries in early historical periods due to the need for not only personal leather clothing such as boots, shoes, and belts, but also farming equipment such as harnesses, saddles, and reins. In addition, tanneries were an integral part of the economic web from the early settlement period through the logging era of the latter nineteenth century. Tanneries processed hides into more durable leather, which could be shipped more easily, and supplied other industries such as cobblers. In contrast, tanneries received waste material from sawmills—the oak and hemlock bark that contained the necessary tannins. Although it is not possible to determine at the present time how the hides were attained, it would be an interesting avenue of research. Were hides bought from individual hunters in the area or did the tannery enterprise include procurement of hides? Was the hunting lodge—the bear camp--operating during the same time period, and if so, were they connected?

Tanneries usually declined after the introduction of cheaper goods along rail lines in the latter half of the nineteenth century or when the lumber had been logged out. During the early twentieth century, mineral-based tanning techniques alleviated the need to be located near

timber sources. The location of tanneries changed accordingly, and the tannery industry changed from being a sister industry of logging to a sister industry of meatpacking (Explore PA History 2003). Although a necessary part of early economies, the industry is known to be one with high environmental consequences, particularly when associated with mineral-based tanning.

At **5401 Blevins Gap Road**, located near Rieber/Valley Lake, stands a **camelback** home. Camelback homes are a variation of the shotgun house, which is one room wide and two rooms deep; the camelback variation includes a two-story addition in the back. Most homes of the shotgun type were built from 1880 to 1930 in metropolitan areas where space was a limitation (McAlester 1990). Its existence here suggests others may have been in the area. It also suggests a shift in demographics, namely a rapid influx of residents due to new manufacturing or resource-extraction jobs. The front shotgun portion of the home exhibits three bays and a front gable. The camelback portion is two stories with an end gable.

The 107-acre **Pinguely property**, located in the vicinity of Rieber/Valley Lake (**Figure 64**, **Figure 65**, and **Figure 66**), was obtained in 2005 using Louisville Metro Funds in connection with the City of Parks initiative (Trust for Public Land 2008).

As discussed above, it is believed by Lois Pinguely that the property was once used by soldiers from Camp Taylor during World War I (Clark 2005). Specifically, it has been suggested the area was used as a firing range. A brief interview with her brother and neighbor, Mr. Robert Lamkin, provided additional details of the history of the property. Mr. Lamkin identified a sunken area at the front of the property as the former location of a sawmill. Reported locations of the sawmill and firing range, however, have not been confirmed through archaeological investigation. Holmberg (2002:159) mentions a rifle range associated with Camp Zachary Taylor in the vicinity of the JMF; however, this one was located near South Park Road. That land was auctioned in 1921 by the Louisville Real Estate and Development Company as a result of the closure and privatization of the camp (see more information above in **Section 2**).

During his interview, Mr. Lamkin provided a wealth of additional information regarding life on the western side of the JMF during the mid-twentieth century. This information provides a comparison and counterpoint to information provided from families operating on the eastern side of JMF with ties to Fairdale. In Mr. Lamkin's interview, ties to the Valley Station area were apparent. Mr. Lamkin related how the family would travel to the dry goods store in Valley Station to acquire supplies. There they would find the store, a train depot, a pickle factory nearby, and a doctor. The doctor was Dr. Schacklette. Mr. Lamkin remembers the time he needed his services for a foot cut while harvesting tobacco. The foot was anointed with coal oil and then wrapped. It healed nicely.

Their lives were much busier and, as he says, they did not have time to get into trouble. Their heat and their cooking was done with wood. Much of it was cut using a sawmill that would be operated by a belt attached to their truck—the truck would be jacked up, a tire would be taken off, and the belt attached to the rim and to the sawmill. They made sauerkraut in a crock with their cabbages. Almost every day had its associated job: Cutting Day, Canning Day, Hog Killing Days, and Making Garden Days were just a few of them. Hog-killing days usually occurred near the first day of winter and were remembered as a great occasion for them. After a hot water soak, the carcass could be split down the middle and parted off—shoulders, tenderloins, etc. To prepare the meat, the recipe called for sage, pepper, salt, and brown sugar. These skills were so important to life back then that they were part of the curriculum at Valley High School where Mr. Lamkin attended.

Their lives back then, he remembers as being “more self-reliant” and the “good life”. As was common for many families during that time—the 1940s—families usually had a barn, garden, and their own milk cow. Their garden was made by first making a hot bed—manure would be placed in the ground, planted with seeds, and then covered. Windows would be used to make the cold frame, then when the seedlings were ready—usually around Derby Day—they would be transplanted to the garden. Their garden supplied them with potatoes, corn, squash, carrots, beans, cabbage, tomatoes, and even rutabagas. Livestock included chickens, hogs, and beef cattle. Protein also came from wild rabbits. Going into town, however, was necessary to buy items such as flour and coffee. They might also sell the cream from their milking. On very few occasions, the family would venture into Louisville to see a movie at Lowe’s, Fourth Street, or another movie house. The city was an enjoyable excursion. One vision that particularly stood out was the electric sparks generated by the trolley cars at night.

Although busier and much more laborious than activities today, Mr. Lamkin remembers life along the JMF as “a good time for me …I really enjoyed it”.

Figure 64. The Pinguely property.

Figure 65. The Pinguely residence.

Figure 66. Barn at the Pinguely tract.

Just north of Rieber/Valley Lake lays cemetery **C41**. C41 is located on the Allbright Farm (Block 1054, Lot 0020) in the Blevins Gap/Deering Road area. Local informants report there are in fact two cemeteries. One has been identified, but the other has not been verified. According the informants, the second one is located between the farms of McAlester and Houchins “two hills over” from the first cemetery (HLPDC 2008).

On **Blevins Gap Road** west of Rieber/Valley Lake stands a two-story, three-bay home built around 1875. It is frame with asbestos block. The roof is standing seam metal. Wings have been added.

Bearcamp Road

Bearcamp Road extends from Blevins Gap Road south and southwestward through Metz Gap into the valley of Brier Creek. Bearcamp Road was named for a hunting lodge that was a popular spot for hunters during the 1800s. During the 1980s, it was burned as a controlled training exercise by the Fairdale Fire Department. Photos exist that show the last bear killed in the area. Foundational ruins are likely present in this area. **Table 18** lists some resources along Bearcamp Road.

Table 18. Historic Resources along Bearcamp Road

Still Standing	Demolished
13900 Bearcamp Road	Lebold House (JF57)
Sanders log house	house site associated with stone pillars
JF30 frame house	Metz House (JF56) 11411 BearcampRoad
550l (1910 house)	
550g (1870 house)	

Within Forest Property. Stone pillars stand on the east side of Bearcamp Road at a demolished house site (HLPDC Files 2008). The bear camp ruins may lie within the forest boundaries.

Outside Forest Property. The **Lebold House** or **Jacob Lebold Farm** (**JF57**) was located at 10911 Bearcamp Road. Archival data documents a J. G. Lebold in the area in 1879 (Beers & Lanagan transportation map 1879). The two-story, five-bay log home had been built in the mid-nineteenth century when the Lebold family immigrated to the area from Germany. The house had a central hall plan with a central door on each floor. Weatherboarding was added to the house exterior. Windows were six-over-six double-hung sash; sidelights were noted along the first floor door. Its chimney was stone and built on one end. Although the 1937 flood did not affect them, renovations including a rear wing and portico were added in that year. Outbuildings included greenhouses and weatherboarded shed. Historic property JF57 has been demolished. Interments of LeBold family members may be found across Bearcamp Road at the nearby Risinger Cemetery.

The Lebold farm was included in the 1990 NRHP context, Agriculture in Louisville and Jefferson County, 1800-1930, which was prepared as a subcontext to the Louisville and Jefferson County, Kentucky, Multiple Property Listing. In this document, the Lebold farm was included as an example of the Middle-Class Farm property type. Another name associated with the property was the R. Steele Farm.

The Metz House (JF56) once stood at 11411 Bearcamp Road but has been demolished. The dwelling was a two-story, V-notched log home. Its chimney was partially stone. The last owner of the property was F. J. Luhman, a descendant of the Metz family. In 1987, Luhman believed the dwelling to be about 100 years old. The gap through the knobs along Bearcamp Road has been named Metz Gap, indicating the importance of the Metz family in this portion of the forest. Graves of Metz descendants lie in the Risinger Cemetery.

At **13900 Bearcamp Road** stands a 1½-story three-bay home. Windows are four-over-four pane double-hung sash. The central chimney is brick; roof is asphalt shingle. Exterior is weatherboard.

Stone pillars stand on the south end of Metz Gap. Their function and age are unclear, but this is in the vicinity of where the old Bearcamp Lodge stood.

The **Risinger House (JF55)** was the home of Ode Risinger. It was located along an unnamed tributary just south of the stone pillars. At the time it was demolished, it was over 100 years old. Risinger had owned it for 85 years in 1987. This was a one-room, single pen log structure with one story. It was located along Bearcamp Road (see Will Book 10, page 225). On an 1879 map, this structure is present and looks to have been the home of William Snawder.

An 1858 map also identifies property belonging to John Stone and George Snawder somewhat to the south of the house. The home there was known as the Brennan House. It was a rectangular log structure facing south with a two-bay front. John Snawder received his land from the Nicholas Buckner tract before 1848. It was on Brier Creek. Thomas Snawder owned the adjoining tract. Maggie Snawder sold it to Hiram Risinger for $50.00 along with ½ of 37 acres (Deed Book 398 X 409 [1879]).

A log structure attributed to the **Sanders** family stands along a tributary to Brier Creek. No additional information was available at the HLPDC files.

As identified in HLPDC files, **JF30** was a frame house. No additional information has become available.

Two additional houses were located at the western end of Bearcamp Road. These include **550l**, a house dated to around 1910, and **550g**, a house dated to around 1870.

Mitchell Hill Road

Mitchell Hill Road extends from its beginning at Mt. Holly road up into JMF to terminate at Top Hill Road. **Table 19** lists some historic resources along this road.

Table 19. Historic Resources along Mitchell Hill Road

Still Standing	Demolished
Dennis Mitchell School (Welcome Center)	JF62
log structure at 11302 Mitchell Hill Road	JF61
Caple farm at 110 Rosebank Ct.	
Walter Garr log structure	
spring and quarry	

Within Jefferson Memorial Forest Property. The Dennis Mitchell School existed in three different buildings from 1878 to 1929. A history of the school was completed in 2003 as part of Adam King's Public History Internship at the University of Louisville. The information that follows was derived from his summary. The first building in which the school met was a log structure around 1881. Whether it began as a one-room structure or not is unclear, but by 1906 the structure had two rooms indicating a sizeable student population in the area. By this time, however, the structure was in "very poor" condition, and a new one-room frame structure was erected by 1909. Unfortunately, this structure burned down in 1911 and it was not until 1916 that another structure was completed (**Figure 67**).

Of particular pride was the basement portion of the structure. Teachers employed during this time included Maude Adrian Witt Caple in 1906 and Amelia Schaffner in 1909. This one-room frame structure became the Welcome Center in 1994.

After twelve years of use by the school system, the school and property was sold at public auction to Walter G. Gilligan and Matthew and E.T. Colvin. A portion of the school building then became the Mitchell Hill Church of God. The pastor was Tom Colvin. Colvin and his family of twelve lived on the first floor and the church meeting rooms were in the lower story. As part of his investigation, King interviewed Tom Colvin's daughter Mabel who grew up in the structure. Her interview provided much oral history associated with the structure including information on landuse practices and daily life. The family maintained a pasture near the school as well as a farm in Bullitt County. In addition to helping their neighbors with harvests and curing hams, their family welfare was aided by squirrel hunting and flower sales to Louisvillians day-tripping to the area. Archaeological features that may be associated with the historic structure includes the two outhouses located on either end of the building and a garden plot maintained by the Colvin family.

Figure 67. Mitchell School.

Outside JMF Property. The Dennis Mitchell School building now used as the JMF Visitor's Center replaced a log cabin built in the 1800s. This structure was moved across Mitchell Hill Road for use as a private residence. It is still standing today (**Figure 68**).

Figure 68. Clapboarded log house moved from site of Mitchell Schoolhouse.

Historic property **JF62** was an I-house located at 10101 Mitchell Hill Road. The one-story, three-bay house had a central door and central gable that had a sunburst cutout pattern. The home had been built in 1925 and had served as the Lions Club meeting house for about 20 years. As the house became no longer structurally sound, a permit for demolition was sought, and in 2004 the building was demolished.

Historic property **JF61** was located southwest of the intersection of Holsclaw Road and Mitchell Hill Road. It was a 1- to 1½-story log home with a hall and parlor floor plan. The logs had been hand hewn and joined with half-dovetail notching. A stone chimney stood along one end. By the time of the property survey, the house had collapsed and only the chimney stood standing.

One **Caple Farm** is located off of Mitchell Hill between Manslick and Keys Ferry Road at 110 Rosebank Court (**Figure 69**). The home was an American Foursquare style with a hipped roof built in 1907. The roof had flared eaves and dormers. Door was left of center; windows were one-over-one double hung sash. At the time of documentation for the HLPDC, the house had vinyl siding overlying the frame structure. Outbuildings included a barn and shed; landuse included a vegetable garden, pasture, and pond. According to genealogical information provided by Victoria Caple Kaelin, the house was built by Ben and Martha Jane Graham Caple's son, George Washington Caple and his wife Clara Younger. It remains in the Caple family.

In addition to this Caple Farm, Caple properties lie along Caple Avenue, at the intersection of Mt. Holly Road and Caple Avenue, and off of Jefferson Hill Road. Additional Caple properties and family history could be investigated further. Much of the Caple family history entwines with other JMF families, such as the Mitchells and the Snawders. Two of Dennis Mitchell's wives, for example, were Caples—Sarah Jane and Catherine.

Figure 69. Caple House located at 110 Rosebank Court. Courtesy of Victoria Caple Kaelin. Photo taken in 2007 by Mrs. Kaelin.

Another log structure stands on Mitchell Hill Road just east of the Dennis Mitchell School/Welcome Center. It had a central chimney. The name “Walter Garr” was visible on some property maps, but no additional information could be discovered.

In addition to these, at the top of Mitchell Hill lie a spring and quarry site; this appears to be on private property. At the intersection of Mitchell Hill and Top Hill roads lies the Mitchell Cemetery (C73g).

Holsclaw Hill Road

Several historic properties are located along Holsclaw Hill Road (**Table 20**).

Table 20. Historic Resources Located Along Holsclaw Hill Road

Still Standing	Demolished
sided log house	house site associated with well
Horine Manor House	cabin site
	storage pole building
	sawmill pole barn
	ranger station
	Keystone Lodge

Within the forest: Horine Section. The Horine Manor House is located off Holsclaw Hill Road near the Bullitt County line (**Figure 70** and **Figure 71**). It currently serves as a meeting and conference center, but has a long history. At the time of survey by the HLPDC, the house was described as Victorian in style. The structure appeared to date to the 1880's. Chimneys stood at both ends, and the exterior was English bond veneer. According to documentation at the HLPDC, oral tradition relates the bricks had previously been used in a courthouse structure; courthouse for what political entity remains unclear. The roof is a standing seam tin roof. Renovations/additions occurred through the 1950's; major land acquisitions to the property occurred during the 1930's in which the parcel increased to 1056 ac.

Figure 70. Structure known as the Manor House in Horine Reservation.

Figure 71 . Sideview of the Manor House in Horine Reservation.

The farm became known as High Acres Farm and, in 1961, owners Emmet Field Horine and Helen Ruthenberg Horine donated the property by trust agreement to the Old Kentucky Home Council of the Boy Scouts of America. During this time, the house was occupied by Scoutmaster Steve Goodwin.

The Horine Section has a fascinating history not only as the estate of the Horines, but also as the Horine Reservation of the Boy Scouts of America. Another name associated with the area, particularly the portion with the ropes course was the Brown C11 Reservation. Mr. Paul Cox, a former Boy Scout, shared his knowledge of the reservation in 2008. During Mr. Cox's time at the scout camp, four additional structures had existed in the Horine Reservation. Within the present day grassy lawn of the manor house were two of the structures. Nothing remains of them today except associated archaeological sites and memories within the hearts and minds of past scouts. One building, the Ranger Station, had been close to the present driveway to the Horine Manor House (**Figure 72**). The second building had been in front of the Manor House, nestled between trees that still outline its boundaries (**Figure 73**). This structure, known as the Keystone Lodge, had been a brick, one-story structure with windows on each wall and a fireplace along the middle of the back wall. This had been a favorite place for warming up after some winter excursion.

Figure 72. Location of the Ranger Station in foreground. Horine Manor House in far left.

Figure 73. Location of Keystone Lodge in foreground. Horine Manor House in background.

In addition to these two structures, a pole barn had been located in the grassy area behind where the trail map sign now stands (**Figure 74**). This had been used for storage. Another pole barn used to shelter a sawmill had been located on the left just after going through the gate to the campgrounds. This may have been the sawmill noted in the trust agreement between the Horine heirs and JMF. Dimensions of this barn were approximately 30 x 20 ft. As Paul Cox remembers it, when in use, a v-8 motor located outside the barn would be hooked to the sawmill by a belt. According to the 1961 lease agreement, the motor was a Caterpillar Diesel D-1100, and the sawmill was a Frick No. 00 Belt Feed sawmill. The demonstrations, however, did not occur too often as they could be hazardous. Not only was the sawmill and motor loud, but the belt connecting them could fly off. A birdhouse and meadow grassland may be found at this location now.

In addition to these historic structures, an apple orchard presumably planted by the Horine family had been tended in the lawn portion of the large open area north and west of the entrance road (**Figure 75**). Scouts might remember the sweet smell of apple blossoms in the spring or the pungent smell of rotting fruit in the fall (Paul Cox, personal communication 2008).

Figure 74. Location of the storage pole barn.

Figure 75. Location of a former apple orchard.

In 1989, the Boy Scout Council decided to move its camp elsewhere—to the Harry S. Frazier Jr. Scout Reservation/Camp Crooked Creek a few miles south by Bernheim Forest. Jefferson Memorial Forest acquired the Horine interest from the Horine heirs at that time. Goodwin stayed at JMF as a Ranger. Cox and his brother also visited often and were bestowed the title of Assistant Rangers in the Order of the Arrow. When they came, Goodwin would have lists of duties for them to complete. Much of their time was spent clearing 15-foot wide fire breaks.

Program House. The Program House is a small frame structure with an intact well and cistern (**Figure 76**). The house was built in the 1950s and was occupied by the Rennert family. The structure has been significantly modified and is currently used to house staff of the JMF.

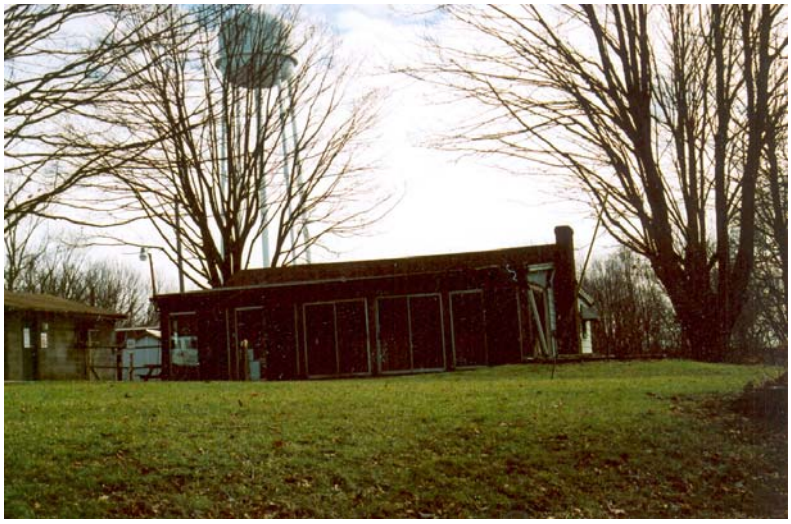


Figure 76. The Program House, formerly occupied by the Rennert family.

Also within the Horine section lie the Horine Cemetery, a sawmill barn, and also a well and associated house site. These lie in Bullitt County and have not received HLPDC numbers.

Outside the Forest. Also along Holsclaw Hill Road are Cemetery 73a, a sided log house, the Holsclaw Hill Road Cemetery, and a previously demolished cabin site.

Jefferson Hill Road

Outside the Forest. Another Caple farm lies along Jefferson Hill Road. The following information on the ownership of the farm was provided by family genealogist Victoria Caple Kaelin. In the 1840's, the farm was purchased by Nelson Caple and Sarah Jane (Potts) Caple. Their son, James Andrew, inherited the farm after them, and then grandchildren Rals Nelson Caple and Annie Caple Snawder inherited the farm. In 1913, the farm changed hands to the McKay family, thence to the Luther Marcum family in 1918. The farm appears to be still owned by the Marcum family. The Caple Cemetery noted below lies on this property.

In addition to the Caple farm, a camelback stood on Jefferson Hill Road that exhibited a brick chimney, asphalt shingles, and clapboard front and back part.

Other Road Corridors

Additional historic resources are present around the forest on other road corridors (**Table 21**).

Table 21. Historic Structures along Other Roads

Still Standing	Demolished
11112 Harrison	James Augustus House (JF69)
Dunn House (JF40) 9208 Farmer Lane	
Kent House (JF68)	
Becker House (JF64)	
camelback at Penile and Manslick Roads	
JF58 (Stonestreet)	
columns at Manslick Road and Plant Road	

Three historic structures were identified in HLPDC files along New Cut Road. These include **JF65**, a **log house** at 5806 New Cut Road, the **Fred Dockery House** (**JF66**) at 5728 New Cut Road, and the **Patterson House** (**JF67**) at 5716 New Cut Road.

One historic structure, **JF58**, stood on Stonestreet Road. No additional information has become available regarding this structure.

Four "columns" are recorded along Manslick Road at Plant Road. Their relationship to other structures or sites is uncertain, and it is not certain what type of resource this record describes.

The **Becker House (JF64).** At the time of HLPDC survey, a five-bay frame house stood at 11112 Harrison that exhibited end brick chimneys and a gable roof. It has been sided over. At one time, Judy's Hair Fashions occupied the space.

The **Dunn House (JF40)** stood at 9208 Farmer Lane at the time of HLPDC survey. The one-story dwelling was six bays wide. The log and frame structure was covered with aluminum siding. Two brick chimneys stood at either end.

According to HLPDC files, the **Kent House (JF68)** was a two-story dwelling owned by Charles and Dorothy Kent located on DeZern Avenue. The second story was five bay with a central door and six-over-six pane windows. The dwelling had two interior stuccoed brick chimneys.

The **James Augustus House (JF69)** once stood at 10616 National Turnpike. This dwelling had been a two-story frame I-house with a gabled projection occupying the central bay. Refinements such as Eastlake-style porch, the front gable, and star-shaped patterns on cornices are typical for the late nineteenth century. James' grandfather, Thomas had acquired the land in 1839 and gave it to his three grandchildren in 1860. The dwelling had been constructed by James W. R. Augustus in 1874-1879 and is visible on the 1879 atlas (Beers and Lanagan 1879). A store was in operation in the building by 1881. James Augustus (1846-1916) and his wife, Fayette (1846-1919), are buried in the Mt. Holly Cemetery (**Figure 77**).

Figure 77. Grave of James and Fayette Augustus.

The dwelling was owned by the Carmon family from 1970 to 1978 and became known as the Carmon House. The dwelling has been demolished. An outbuilding that stood to the rear of the house was a single pen log structure with V-notches.

Another **camelback** stands at Penile and Manslick Roads (**Figure 78**). This example was originally used a storefront. Windows are two-over-two pane double-hung sash; the exterior has weatherboarding. Cornerboards are also evident. Outbuildings include a garage with exposed rafter ends. Building still stood in 2008.

Figure 78. Views of the commercial building located at the intersection of Penile and Manslick Roads.

Bridges

Several concrete bridges once spanned the creeks in and around the forest. Notation on file at the HLPDC claimed these were built by the Works Progress Administration (WPA), and listed two structures in particular in relation to JMF. The first of these was located on Keys Ferry Road between Mitchell Hill Road and Jefferson Hill Road (**Figure 79** and **Figure 80**). This small bridge crossed Bee Lick Creek. This bridge was examined in March 2008, and was found to be impressed with the date 1948. The WPA was operative from 1935 until 1943, or until the involvement of the US in World War II. Therefore, this bridge, although some sixty years old, was not built by the WPA.

Figure 79. Concrete bridge on Keys Ferry Road.

Figure 80. Additional shots of Keys Ferry Road bridge.

A second reportedly WPA bridge was located on Mitchell Hill Road between the Tom Wallace Area entrance and Holsclaw Hill Road. An examination of the bridge revealed that the old bridge has been replaced by a modern structure. This was confirmed by Forest Director Bennett Knox who believes the bridge to have been replaced around 2005. Notes on file at the HLPDC indicate the bridge had a design similar to that presented in **Figure 80**. Knox says a third similar bridge at the juncture of Holsclaw Hill Road and Mitchell Hill was also recently replaced.

Towers

Fire Tower. With forest fires presenting a major problem in the forest, a one-hundred foot fire tower was erected on Holsclaw Hill in 1947 as one of the first actions of the newly hired fire warden, Marlon D. Rennirt. The tower was procured from the Aeromotor Company of Chicago. The fire tower was equipped with a telephone and two-way radios, and provided a view of nearly 35,000 acres of forest (Armstrong 2001:440). Access to the tower was provided to the public, and those who wished to climb the structure were inducted into the "Jefferson County Squirrel Club"; it was often staffed by Merle Ingram, grandmother (History of the Jefferson County Memorial Forest (www.geocities.com/Yosemite/Trails/9476/history_1989) (JMF n.d.a.). The fire tower was dismantled in 2004 (JMF 2008).

Alpine Tower. A 52-foot tall Alpine Tower was also emplaced in the JMF in 1992 (**Figure 81**). The climbing tower, located in the Horine Reservation section of the JMF, is rated one of the best-maintained in the nation (Kapp 2005). Alpine Towers International, founded in 1989 in Jonas Ridge, North Carolina, built the tower for the Forest in 1992. It was the 10th tower built anywhere by the company that now has over 300 world-wide.

The tower's structural analysis was performed by Utility Technology Engineers-Consultants. The analysis included lightning protection, weight load, wind load, and preservation treatments. They found the tower could withstand over 100-mile-an-hour winds and a weight load equivalent of twelve 400-pound people climbing simultaneously. The unique design allows for over 100 ways to reach the summit (Alpine Towers International 2008).

Figure 81. Alpine Tower at JMF.

The towers are used at schools, scout camps, and military bases across the country and in Europe for purposes of improving self-esteem and self-confidence in a controlled, outdoor experience (Maguire 2006).

The tower was designed to develop climbing skills (Armstrong 2001:440). The philosophy of the "tower experience" provides three distinct benefits. Besides the opportunity to increase personal physical strength and endurance, there are opportunities to encourage group problem-solving and to develop corporate teamwork. All of these are accomplished by climbing the pine tower, either "rock wall" style or by a team approach involving a climber/belayer approach (Alpine Towers International 2008).

The JMF offers unique team-building programs, both corporate and school-related (Kapp 2005).

Cemeteries

A number of cemeteries are located in or near the JMF. The Historic Landmarks and Preservation Districts Commission maintains a file of cemeteries known to be located in the vicinity of the forest. These cemeteries are identified with the designations “C” (cemetery) 73, a through j. Cemeteries known to be located outside the forest are labeled with other numbers. Within the present JMF boundaries are three: Rennert (C73i), possibly the Mitchell (C73g) Cemetery located at the intersection of Top Hill and Mitchell Hill roads (**Figure 82**), and the Horine Cemetery (not labeled as it is in Bullitt County) located in the Horine Reservation. From the names and dates on markers, a number of demographic factors can be discerned. The earliest range of dates from area markers comes from the Pendleton Cemetery, where interments occurred from 1835 through the end of the nineteenth century. James C. Pendleton and his wife, Susan, were interred in the Pendleton Cemetery and are the citizens with the earliest birth dates—1783 and 1792, respectively. The earliest interment date of those studied was James C. Pendleton in 1835. Other early dates include 1844 and 1845 for Barth children interred in the Pendleton Cemetery and 1850 dates for individuals in the Brown and Pendleton Cemeteries.

The earliest interments in the Holsclaw Hill Road Cemetery appear to be John T. Orr and Mary J. Watson, who both died in 1905. A few such as Chester Waddell, Beatrice Smith, and Lillie B. Orr died in the thirties (1930, 1937, 1939, respectively). The next group of interments were all in 1947—James J. Smith, Rose Katherine Hutchinson Calvert, Sarah Ellen Hutchinson, suggesting a contagious illness that year. During later years, interments were more sporadic. The most recent interments were James F. and Alma Smith, husband and wife, who died in 1983.

Numerous other small cemeteries such as the Risinger Cemetery are located on private property in the JMF vicinity (**Figure 83**). Many early settlers of the area are interred in the Mt. Holly Cemetery (**Figure 84**). Local residents also speak of small one-to-two grave cemeteries whose locations are now lost in the underbrush within and around the forest.

Figure 82. Portion of the Mitchell Hill Cemetery.

Table 22. Summary of Known Cemeteries in Vicinity of Jefferson Memorial Forest

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
C7 is located southwest of the southwest corner of the house at 2312 Blevins Gap Road (Block 1049, Lot 0654, LRSN 257064) along a (then) dry creek bed.	Private	C7			HLPDC files
C41 is located on the Allbright Farm (Block 1054, Lot 0020) in the Blevins Gap/Deering Road area.	Private	C41		Local informants report there are in fact two cemeteries. One has been identified, but the other has not been verified. According the informants, the second one is located between the farms of McAlester and Houchins “two hills over” from the first cemetery.	HLPDC files
C57 is located northwest of the forest on Deering Road on other side of I-265	Private	C57			HLPDC files
C73a is located on a lane off of Holsclaw Hill Road	Private	C73a			HLPDC files

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
C73f is located on Snawder Lane next to Mason Cemetery (C73e)	Private	C73f			HLPDC files
C73j is located near the Horine Cemetery near Headley Hollow in Brier Creek drainage off of Bearcamp Road	Private	C73j			HLPDC files
C75 appears to be located at 10615 Fox Avenue on property owned by Howard Smith.	Private	C75			HLPDC files
C85 is located on Mt. Holly Road	Private	C85			HLPDC files
C116 is an unnamed cemetery located in an open lot off of Anatahan Court within a subdivision off of Mondamon Drive.	Private	C116			HLPDC files
Brown Cemetery, located off Pendleton Road in Thicket	Private	C50 (from C73 folder)	Samuel Brown 10-20-1857 in 80th year of life		HLPDC files
			Redding B. H. son of Samuel & Mary Brown b. 8-26-1836 d. 3-28-1850		

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
Caple Cemetery is located on ridgetop north of Jefferson Hill Rd	Private		Andrew Caple (1771-1843) Mary Lochry Lacey Caple (1760-184_) Nelson Caple (1808-1855)	Approximately 15 graves Stones gone except for tomb for Nelson Caple	HLPDC files, Victoria Caple Kaelin, personal communication 2008
Coral Ridge Cemetery behind, but not affiliated with Separate Baptist Church	Private	C73c	Easton, DeZern, Garr, Hozendore, McAllister, Morgan, Neagle, Oakes, Risinger, Snawder, and more	"approx. 100 graves several unmarked fieldstones" "oldest legible grave: Elizabeth Easton Jan. 16, 1821 June 21, 1866"	HLPDC files; Rootsweb 2008b
Ferguson Cemetery, located south of Knob Creek in Bullitt County	Private				
Graham Cemetery, located south of Knob Creek in Bullitt County	Private				
Cemetery owned by A. Hartledge, located on the ridgetop extending from Snawder Lane Near Bullitt Co. Line	Private	C73h	Snawder, Risinger, Stolck, Rarden, Hartledge, Seybolt, Dillon, Wilson, Lawson, Thompson	"oldest graves appear to be 1885—several Rarden & Seybolt children"	HLPDC files
Holsclaw Hill Road Cemetery Located near Holsclaw Lookout Tower	Private, but very close to boundary		see **Table 23**	"fenced, top of hill, graves face east"	HLPDC files

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
Horine Cemetery	Private		**Table 24**		HLPDC files
Horine Cemetery Horine Reservation	JMF		see **Table 25** includes Emmet Field Horine, his wife Helen, and his father George		site inspection June 2008
Jefferson Hill Road Cemetery		not on map; could be C73f or Caple Cemetery		"Stonemason Ralz Caple cut stone 'tomb'" "unmarked cemetery nearby fenceline & creek bed"	HLPDC files
Lonesome Hollow Cemetery, located toward Penile on right on Blevins Gap curve	Private				HLPDC files
Manslick Cemetery, located on Manslick Road	maintained by Metro Parks			for degenerate	RootsWeb 2008c
Mason Cemetery located on Jefferson Hill off Snawder Lane next to C73f	Private	C73e	Anna L. Mason 1909-1988 Jake Mason 1901-1979 Fisher Lena K. 1890- James W. 1889-1955	24 fieldstone-marked graves oldest is 1910 b. d.	HLPDC files

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
Mitchell Cemetery, located at intersection of Mitchell and Top Hill Roads	JMF?	C73g	Caple, Graham, Griff, Kaufman, Miller, Nett, Smith, Stinson	list of	HLPDC files; site inspection June 2008; complete list of interments can be found at: www.rootsweb.ancestry.com/~kyjeffer/cems/mitchellfamilycemetery.html
			Squire Caple Oct. 31, 1839 Aug. 7, 1907		
			Carrie E., Daughter of Dennis & Catharine Mtichell October 30, 1874 April 17, 1893		
			Catharine, wife of Dennis Mitchell Sept. 15, 1841 Dec. 18, 1893		
Mt. Holly Cemetery, located off of Mt. Holly Road in Fairdale	Private		Augustus, Fisher, Farmer, Harrison, Hays, Gerking, Miller, Woods, Snawder, Younger, and more	earliest found was John Farmer (1789-1851)	site inspection March, 2008; also, Rootsweb 2008d
Pendleton Cemetery, located in Bullitt County	Private	C73d	see **Table 26**	"endangered headstones moved, damaged top of hill under large tree"	HLPDC files
Rennert Cemetery	JMF	C73i			HLPDC files
Risinger Cemetery, located off Bearcamp Road	Private	C134	Arnold, Baumgardner, Baker, Blevins, Bruce, Colvin, Gagel, Horn, Imes, LeBold, Metz, Pfister, Ray, Rennert, Snawder, Stinson,	"2 acres +/- 100 graves" formerly known as Gagel cemetery	HLPDC files; Rootsweb 2008e; site inspection March 2008

Cemetery	Ownership	Preservation Office Identifier	Names	Notes	Source
			Woods, Whitaker, Zenor	earliest found was Adam Arnold (1794-1871)	
Smoot Cemetery is located at 10515 Fox Road off of Mt. Holly Road just below the 550' contour. It includes 0.214 ac.	Private	C4 (reidentified as C73b)	see **Table 27**	considered endangered includes small obelisk "graves face east, no order apparent"	HLPDC files
Snawder	Private	Not on map		"The old cemetery on the west side of Bear Camp Road, surrounded by a rock wall containing about five graves (probably those of Thomas Sr., Catherine, Thomas Jr., his wife, Mary and probably one of Thomas Jr.'s sons)."	Snawder genealogical paper from JMF Archives (n.d.c)
Wilson-Snawder	Private	This one could be 73f also		"east side of Bear Camp Road"	Snawder genealogical paper from JMF Archives (n.d.c)

Table 23. Gravesites in Holsclaw Hill Road Cemetery

Felix Harrison Smith 1912-1973	James J. Smith 1880-1947	Beatrice Smith 1916-1937	Mary B. Adams 1879-1958	Chester Waddell 1911-1930	John Waddell 1870-1935	Sarah Waddell 1869-19??
Beeler James E., Sr. 1904-1977 CCM US Navy WWII Naomi 1917-	Virgin Mary Statue	William Waddell 1897-1954	Orrville Ray son of Geo. & Mildred Hawkins 1952-1954			
Orr John T. 1860-1905 Lillie B. 1860-1939	Mary J. Watson 1822-1905	four additional blank fieldstones to the right				
	one additional blank fieldstone to the left	Downes Mary Orr 1889-1969	Stanley Lillian 1909-	five additional blank fieldstones to the right	James Albert Smith 1931-1959	two additional blank fieldstone to the right**
Billy Hutchinson son of Rose & Chris	Rose Katherine Hutchinson Calvert 1906-1947	Sarah Ellen Hutchinson 1869-1947	two additional blank fieldstone to the right			
**Smith James F. 1910-1983 Alma 1914-1983	Annetta Smith 1931-1976	Bessie Mayhall 1892-1981	William Stanley Mayhall 1916-1979			

**row continues

Table 24. Gravesites in Horine Cemetery

Angeline, wife of W.H. Hobine [sic] Dec. 18, 1841 Oct. 17, 1886	Roena, daughter of Henry & Mary Horine Apr. 12, 1829 Feb. 10, 1864	John Gordon, son of Henry & Mary Horine Dec. 31, 1831 Dec. 6, 1852
Mary, wife of Henry	Henry Horine	Walker, son of Henry & Mary aged 7 yrs
Nathaniel Barmore Mar. 15, 1827 Genesee Co, NY July 16, 1880 Louisville, KY	Elijah W. Johnson Oct. 22, 1841 Montgomery Co. OH May 19, 1882	

Data from HLPDC files

Table 25. Gravesites in Horine Cemetery Located in Horine Reservation

<table>
<tr><td>unmarked</td><td></td><td>Nina M. Horine Robinson
8 Dec 1887
22 Oct 1960</td><td></td><td colspan="2">James Daniel Armstrong
1942-1979</td></tr>
<tr><td rowspan="2">Emmett C.
son of
Ralph B. and
Hallie B. Horine
Aug 10, 1907
July 2, 1908</td><td rowspan="2">James F. Horine
Feb 9 1856
Mar 24, 1910</td><td rowspan="2">obelisk:
George Horine M.D.
Apr 10, 1857
Dec 8, 1903

Elizabeth B. Horine
Jan 23, 1867
May 11, 1956</td><td rowspan="2">Infant of Herbert & Dorothy Horine Arntson
20 Aug 1947</td><td colspan="2">Horine</td></tr>
<tr><td>Emmet Field
3 Aug 1885
1 Feb 1964</td><td>Helen R.
5 Feb 1890
20 May 1965</td></tr>
<tr><td colspan="2"></td><td>unmarked grave or foot marker in entrance path</td><td colspan="3"></td></tr>
</table>

Table 26. Gravesites in Pendleton Cemetery (C73d, Bullitt County)

William H. son of D.H. & A. Pendleton Dec. 23, 1870 Aug. 5, 1871	George W. son of Geo. W. & Sarah A. d. July 25, 1850 1 yr, 8 mo, 6 days	Arthur L. Pendleton son of D.H. & A. Nov. 28, 1875 May 2, 1881
Charles W. son of Geo. W. & Sarah A. Jan. 1, 1857	Sarah Ann daughter of Geo. W. & Sarah A. Barth d. Jan. 6, 1857 aged 4 yrs, 8 mo, 17 days	James P. Pendleton d. Jan. 29, 1851 27 yrs, 10 mo, 22 days
James C. Pendleton Feb 23, 1835 aged 51 yrs, 5 mo, 21 days		David H. Pendleton Dec. 24, 1828 Aug. 10, 1905
	Susan wife of James C. Pendleton Oct. 11, 1792 July 5, 1865	Minerva J. Barth Apr. 21, 1844 aged 2yrs, 10 mo., 15 days
		J. S. Barth Jan. 1, 1848 aged 1 yr, 6 mo. ? days

Table 27. Gravesites in Smoot Cemetery (C4/C73b)

Obelisk	South Face	B.H. Smoot	b. Aug. 6, 1959 d. Feb. 17, 1931
		Rosa E. Smoot, wife of B.H.	b. Sept. 20, 1866 d. May 6, 1909
	West Face	Charles E., son of B.H. & R.E. Smoot	b. May 11, 1905 d. Dec. 29, 1922
	East Face	Orville H. son of O. & G. Estes	b. Jan. 4, 1917 d. July 7, 1920

John T. son of J. & C. Hammond Aug 29, 1883 Apr. 30, 1911	Albert Ernest son of W.F. & A.F. Buchman Oct. 26, 1910 May 9, 1911	
F. Leslie Corder May 3, 1894 Sept 2, 1930 son of J. W. Sidney Corder		
Fanny Lee Moore Dec. 8, 1896 Aug. 11, 1900	Charles N. Moore Feb. 14, 1900 Aug. 13, 1900	"[hidden in thicket]" James Lewis Poynter 1925
Mary Louise dau of J.R. & M.J. Hough May 19, 1906/8 Nov. 24, 1908	Nina Bell dau of J.R. & M.J. Hough Dec. 15, 1903 Jan. 15, 1906	Charles E. "[remainder of stone buried]"

Table 28. Index of Families Buried within Area Cemeteries

Family Name	First Names	Cemetery
?	Charles E.	Smoot (C4/C73b)
Adams	Mary B.	Holsclaw Hill Road
Arnold		Risinger
Barmore	Nathaniel	Horine on Bearcamp Rd, Bullitt Co.
Barth	Charles W.	Pendleton
Barth	George W.	Pendleton
Barth	J. S.	Pendleton
Barth	Minerva J.	Pendleton
Barth	Sarah Ann	Pendleton
Baumgardner		Risinger
Baker		Risinger
Beeler*	James E., Sr.	Holsclaw Hill Road
Beeler	Naomi	Holsclaw Hill Road
Blevins		Risinger
Bolin		Mitchell (C73g)
Brown	Redding B. H.	Brown (C50)
Brown	Samuel	Brown (C50)
Brown		Mitchell (C73g)
Bruce		Risinger
Buchman	Albert Ernest	Smoot (C4/C73b)
Calvert	Rose Katherine Hutchinson	Holsclaw Hill Road
Caple	Henry Clay	Mitchell (C73g)
Caple	Sarah Elizabeth Berry	Mitchell (C73g)
Caple	Squire	Mitchell (C73g)
Caple	Andrew	Caple
Caple	Mary Lochry Lacey	Caple
Caple	Nelson	Caple
Colvin		Risinger
Corder	F. Leslie	Smoot (C4/C73b)
Dezern		Coral Ridge (C73c)
Dillon		Hartledge (C73h)
Easton		Coral Ridge (C73c)
Elzy		Mitchell (C73g)
Ewing		Mitchell (C73g)
Farmer		Mt. Holly
Ferguson		Mitchell (C73g)
Fisher		Mt. Holly
Fisher	James W.	Mason (C73e)
Fisher	Lena K.	Mason (C73e)

Gagel		Risinger
Garr		Coral Ridge (C73c)
Gerking		Mt. Holly
Graham		Mitchell (C73g)
Griffin		Mitchell (C73g)
Griffin*	John Dennis	Mitchell (C73g)
Hammond	John T.	Smoot (C4/C73b)
Harrison		Mt. Holly
Hartledge		Hartledge (C73h)
Hawkings		Mitchell (C73g)
Hawkins	Orville Ray	Holsclaw Hill Road
Hays		Mt. Holly
Horine	Angeline, wife of W. H. Horine	Horine on Bearcamp Rd, Bullitt Co.
Horine	Henry	Horine on Bearcamp Rd, Bullitt Co.
Horine	John Gordon	Horine on Bearcamp Rd, Bullitt Co.
Horine	Mary	Horine on Bearcamp Rd, Bullitt Co.
Horine	Roena	Horine on Bearcamp Rd, Bullitt Co.
Horine	Walker	Horine on Bearcamp Rd, Bullitt Co.
Horn		Risinger
Hough	Nina Bell	Smoot (C4/C73b)
Hough	Mary Louise	Smoot (C4/C73b)
Hozendorf		Coral Ridge (C73c)
Hutchinson	Billy	Holsclaw Hill Road
Hutchinson	Sarah Ellen	Holsclaw Hill Road
Imes		Risinger
Johnson	Elijah W.	Horine on Bearcamp Rd, Bullitt Co.
Kaufman		Mitchell (C73g)
Lawson		Hartledge (C73h)
LeBold		Risinger
Lillian	Stanley	Holsclaw Hill Road
McAllister		Coral Ridge (C73c)
Mason	Anna L.	Mason (C73e)
Mason	Jake	Mason (C73e)
Mayhall	Bessie	Holsclaw Hill Road
Mayhall	William Stanley	Holsclaw Hill Road
Metz		Risinger
Miller		Mitchell (C73g)

		Mt. Holly
Miller	Ida R. (Snawder)	Mitchell (C73g)
Mitchell	Catharine	Mitchell (C73g)
Mitchell	Carrie	Mitchell (C73g)
Mitchell*	Carl H.	Mitchell (C73g)
Moore	Fanny Lee	Smoot (C4/C73b)
Moore	Charles N.	Smoot (C4/C73b)
Morgan		Coral Ridge (C73c)
Neagle		Coral Ridge (C73c)
Nett		Mitchell (C73g)
Oakes		Coral Ridge (C73c)
Orr	John T.	Holsclaw Hill Road
Orr	Lillie B.	Holsclaw Hill Road
Orr	Downes Mary	Holsclaw Hill Road
Pendleton	Arthur L.	Pendleton
Pendleton	David H.	Pendleton
Pendleton	James C.	Pendleton
Pendleton	James P.	Pendleton
Pendleton	Susan	Pendleton
Pendleton	William H.	Pendleton
Pfister		Risinger
Poynter	James Lewis	Smoot (C4/C73b)
Proctor*	Louis E.	Mitchell (C73g)
Rarden		Hartledge (C73h)
Ray		Risinger
Rayhill		Mitchell (C73g)
Richardson		Mitchell (C73g)
Risinger		Hartledge (C73h)
Risinger		Coral Ridge (C73c)
Rennert		Risinger
Rutledge		Mitchell (C73g)
Schneider		Mitchell (C73g)
Scott		Mitchell (C73g)
Seybolt		Hartledge (C73h)
Smith		Mitchell (C73g)
Smith	Alma	Holsclaw Hill Road
Smith	Annetta	Holsclaw Hill Road
Smith	Beatrice	Holsclaw Hill Road
Smith	Felix Harrison	Holsclaw Hill Road
Smith	James Albert	Holsclaw Hill Road
Smith	James F.	Holsclaw Hill Road
Smith	James J.	Holsclaw Hill Road
Smoot	B.H.	Smoot (C4/C73b)
Smoot	Charles E.	Smoot (C4/C73b)

Smoot	Orville H.	Smoot (C4/C73b)
Smoot	Rosa E.	Smoot (C4/C73b)
Snawder		Hartledge (C73h) Risinger
Snawder	Claud Anderson	Mitchell (C73g)
Snawder	Charles	Mitchell (C73g)
Snawder	Homer O.	Coral Ridge (C73c)
Snawder	Mary E.	Mt. Holly
Snawder	Sarah Ellen	Mitchell (C73g)
Snawder	Virginia L.	Coral Ridge (C73c)
Snawder	William S.	Mt. Holly
Stinson		Risinger
Stinson		Mitchell (C73g)
Stolck		Hartledge (C73h)
Taylor		Mitchell (C73g)
Thompson		Hartledge (C73h)
Thompson		Mitchell (C73g)
Vanover		Mitchell (C73g)
Waddell	Chester	Holsclaw Hill Road
Waddell	John	Holsclaw Hill Road
Waddell	Sarah	Holsclaw Hill Road
Waddell	William	Holsclaw Hill Road
Watson	Mary J.	Holsclaw Hill Road
Weick		Mitchell (C73g)
Whitaker		Risinger
Wilson		Hartledge (C73h)
Williams		Mitchell (C73g)
Woods		Mt. Holly Risinger
Young		Mitchell (C73g)
Younger		Mt. Holly
Zenor		Risinger
Zenor		Mitchell (C73g)
Zoll		Mitchell (C73g)

Known Veterans Marked with *

Figure 83. Risinger Cemetery.

Figure 84. Mt. Holly Cemetery in Fairdale.

Most pertinent to the vision of the JMF as a memorial to veterans are the locations of veteran gravesites within the area. **Table 29** summarizes known veteran gravesites.

Table 29. Veterans' Gravesites Located in Vicinity of the JMF

Military Service	Name	Note	Gravesite
Nineteenth Century	Captain Eli P. Farmer	"Capt" noted on gravestone	Mt. Holly
	Andrew Caple (1771-1843)	Maryland militia	Caple
WW I	John Dennis Griffin (1887-1971)	Pvt US Army	Mitchell (C73g)
	Louis E. Proctor (1893-1960)	CPL HQ CO 90 Infantry	Mitchell (C73g)
WW II	James E. Beeler, Sr. (1904-1977)	CCM US Navy	Holsclaw Hill Road Cemetery
	Jesse T. (1910-1978)	CPL US Army	Coral Ridge (C73c)
	Raymond Morris Cape (1920-1974)	PFC US Army	Coral Ridge (C73c)
	George Cecil Garr (1922-1968)	KY AS USNR	Coral Ridge (C73c)
	Wilburn W. Garr (1920-1980)	PFC US Army	Coral Ridge (C73c)
	George W. Purcell (1928-)	PVT US Army	Coral Ridge (C73c)
	James Purcell (1927-1998)	PVT US Army	Coral Ridge (C73c)
	Carl H. Mitchell (1909-1982)	PFC US Army	Mitchell (C73g)

Traditional Cultural Properties

In addition to cemeteries, bridges, towers, and structures significant by virtue of past associations or age, historic properties that can be nominated to the National Register of Historic Places also include those locations, structures, districts, and objects that perpetuate the cultural beliefs, rituals, and traditions of extant cultural communities. This type of historic property is identified as a traditional cultural property (TCP). The identification and documentation of TCPs has been summarized in National Register Bulletin 38, which can be accessed at http://www.nps.gov/history/nr/publications/bulletins/nrb38/.

TCPs are different from other historic properties nominated to the NRHP in a number of ways. First, in order to identify TCPs, the intangible cultural rituals, beliefs, and traditions of a cultural group must be understood. Only the tangible cultural property may be recommended to the NRHP, but it is the intangible attributes associated with the property that make the property significant. Second, the identification of a TCP relies on an emic approach rather than the etic approach useful for the identification of other historic properties like structures. As such, the identification of TCPs relies on consultation with the cultural communities in question. As recommended by Bulletin 38, cultural groups may include Native American groups, rural communities, ethnic groups, urban neighborhoods, a socioeconomic community, or an artist community. There may be others, depending on the circumstances.

Most important to this project, the bulletin states the following about rural communities: “Examples of properties possessing such significance include…a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-tem residents”. A number of communities around the JMF might fit this definition, but no TCPs have been identified within the park property as of this time.

SUMMARY

Table 30 summarizes the combined cultural resources presently located within the JMF. For future planning purposes, **Table 31** summarizes the combined cultural resources within and surrounding the forest. Home styles encountered during the inventory were predominantly vernacular styles such as the I-house. Although many may be constructed of frame and in a dilapidated state today, other homes were restored by interested parties to exceptional status. A number of homes within the JMF may incorporate a log cabin within its footprint. It is expected that all include archaeological imprints of past activities. Also from this project, it has become evident that many areas apparently deserted today may have supported a larger population and community elements in the past. During these periods, house styles may have included typical urban styles such as the shotgun and camelback styles. Also during periods such as these, population levels may have supported more industries, schools, and churches than before. Further examination of house styles, community connections, and industries of the JMF could continue.

Table 30. Cultural Resources Currently Located within the JMF

Road	JMF Section	Archaeological Sites	Structures	Bridges	Cemeteries	TCP
Blevins Gap Road	Moremens Hill	15JF214 15JF525		none		none
Bearcamp Road		demolished house site accompany pillars 15JF522 15JF523 Late Archaic site	Stone pillars stand on the east side of road	none		none
Snawder Lane		15JF526 15JF527 15JF528 15JF529 15JF530		none	Rennert (C73i)	none
Mitchell Hill Road			Dennis Mitchell School (1916)	none		none
	Tom Wallace	15JF524 possibly another Late Archaic site		none		none
Holsclaw Hill Road	Horine Reservation	poss. historic sites associated with sawmill, Keystone Lodge, Ranger Station, cabin, and well	Horine House sawmill barn well Alpine Tower	none	Horine	none

Table 31. Combined Cultural Resources for the JMF

Road	Archaeological Sites	Structures	Bridges	Cemeteries	TCP
Blevins Gap Road	• 15JF214 • 15JF532 • 15JF525 • historic site associated with chimney	• Penile Baptist Church (JF59) • 2-story brick chimney • JF54 • bungalow • log house, barn, and shed up Sawmill Road • stone pillars at Scott Gap Road intersection • JF53 • 5401 Blevins Gap Road • bungalow near Pinguely Tract • 1875 house west of Rieber/Valley Lake	none	• C7 • C41 • Lonesome Hollow	none
Bearcamp Road	• demolished house site accompany pillars • Late Archaic site • 15JF522 • 15JF523	• LeBold House (JF57)-demolished, but greenhouses remain • Metz House (JF56)-demolished • 13900 Bearcamp-house • stone pillars stand on the east side of road • Risinger House (JF55) • Sanders log house • JF30 frame house • 550l (1910 house) • 550g (1870 house)	none	• Risinger • C73j • Horine • Pendleton • Brown • Wilson-Snawder • Snawder	none

Road	Archaeological Sites	Structures	Bridges	Cemeteries	TCP
Mitchell Hill Road	15JF524	• JF62-demolished • JF61—demolished • Caple House at 110 Rosebank Ct. • log house • Garr log structure • Dennis Mitchell School (1916) • spring and quarry	none	C73g	none
Holsclaw Hill Road	poss. historic sites associated with sawmill, Keystone Lodge, Ranger Station, cabin, and well	• sided log house • cabin site—demolished • sawmill barn • Horine House • well and demolished house site	none	• Horine • C73a • Holsclaw	none
Jefferson Hill Road		• Jefferson High School • Caple Farm at 10300 Jefferson Hill Road	none	• Jefferson Hill Cemetery, which may be C73f or Wilson Snawder • Caple	none
Snawder Lane	• 15JF526 • 15JF527 • 15JF528 • 15JF529 • 15JF530		none	• C73f • Mason (C73e) • Rennert (C73i) • Hartledge (C73h)	none
Mt. Holly Road			none	• C85 • Smoot (C73b)	none
Penile Road	• 15JF143 • 15JF141	• camelback • 137	none		none
New Cut Road		• log house (JF65) at 5806 New Cut Road	none		none

Road	Archaeological Sites	Structures	Bridges	Cemeteries	TCP
		• Fred Dockery House (JF66) at 5728 New Cut Road • Patterson House (JF67) at 5716 New Cut Road			
Other Roads		• Dunn House (JF40) 9208 Farmer Lane • Kent House (JF68) at 11162 Harrison • James Augustus House (JF69) at 10616 National Turnpike • Becker House (JF64) • JF58 on Stonestreet Road			none

5
Recommendations

In order to be an effective management tool, an assessment of cultural resources cannot be merely a summary of old buildings, archaeological sites, bridges, and cemeteries. The assessment must be an evaluation with an eye to future generations. As stated by Donovan Rypkema during a recent New Jersey Preservation Conference:

> Historic preservation is a responsibility movement…..it is a movement that urges us toward the responsibility of stewardship, not merely the right of ownership. Stewardship of our historic built environment, certainly, but stewardship of the meaning and memory of our communities manifested in those buildings as well (Rypkema 2008).

This stewardship of the forest, then, must consider many facets—past, present, and future. The assessment must consider not only the cultural resources but also the oral histories of the present local community and use groups, the natural resources, the landuse patterns associated with these resources, and future changes to these resources and patterns. The recommendations below emphasize this broad, integrated view of stewardship.

Stewardship Challenges

Prior to addressing appropriate recommendations, however, challenges to this stewardship should be defined and understood. Some of the challenges noted below have been identified in previous iterations of planning documents and in statements by local preservationists.

As a forester, Paul Yost knew “The first problem which meets the Forester, when managing forest lands of any type, in any locality, is that of protection against fires”. Yost acknowledged the threat of forest fires and dealt with that from the beginning. A fire tower was constructed and fire suppression strategies were employed. Today, however, policies have changed, and the ecological advantages derived from controlled fires are better understood. Controlled burns can improve soil fertility, create diverse patches of meadow or pioneer species within more mature patches, and germinate seeds of fire-tolerant species. Appropriate management of one resource, however, can be detrimental to another. Fires can destroy or alter archaeological deposits; radiocarbon dates can be skewed by modern charcoal.

Second, another stewardship challenge to ecologists is the spread of invasive plants such as Japanese honeysuckle, tree-of-heaven, and burning bush, which have flourished and taken over some habitats. This is likewise a challenge for the cultural resource specialist; the landscapes of historic properties can contribute to this problem or be contaminated by invasive plants such as these. Similarly, the many home gardens

of the JMF area may contain heritage species important to residents of this area that may cross-pollinate with modern genetically-modified species.

Third, as in other fringe environments, the forest has developed a reputation in attracting unscrupulous characters and as a place for dumping refuse. Area residents also deal with this nuisance. In the spring of 2008, 100 tires, a number of refrigerators, and old metal were collected along Blevins Gap Road by local residents (LouisvilleKY.gov website 2008). Such debris obscures the cultural resources and endangers those conducting surveys.

Fourth, the forest is not continuous. This may prove a problem for not only logistics of trail design and maintenance but also in obtaining a variety of landforms and biotic diversity. With regard to prehistoric landuse patterns, obtaining data regarding past cultures' exploitation of diverse environments would be lacking. An archaeological survey within the present forest boundaries would provide little information on landuse of the Cane Run, Brier Creek, and Knob Creek floodplains, for example.

Fifth, the cultural as well as natural resources of the forest are threatened by natural elements such as the tornado of 1996, storms of 2004, hurricane-force winds of 2008, ice storm of 2009, and daily erosion. The continued identification, documentation, and monitoring of cultural resources are crucial activities in anticipation of future episodes.

Sixth, protection of cultural resources is a difficult endeavor on many levels. Many residents may not see their own family histories and properties as significant and worthy of protection. In addition, there are many in Jefferson County that consider "looking for arrowheads" a favorite pastime. Preservation efforts would not be as successful without the support, concurrence, and energy of the local community.

Recommendations

The recommendations below are aimed at addressing these challenges as well as emphasizing the role of the management team as stewards of these resources. Objectives include development of public interpretation programs, creation of resource protection strategies, completion of additional inventories, further evaluation of resources, and development of future research opportunities.

<u>Public Interpretation</u>

- Website: Update website with additional history, land purchases, pictures. Topics that could be highlighted include area veterans, frontier history, namesakes for recreation areas, industries, continuing historic preservation efforts, and histories of early families.

- Booklets: Compile brief written histories in pamphlet form of the settlement, early families, and culture history of the forest. Topics could include those listed above. Cooperate with local genealogists to compile a book/booklet on each family.

- Theme Booklets: Numerous aspects of JMF cultural history could be explored in more detail, including: sawmills, tanneries, brick manufacture, charcoal manufacture, and saltworks.

- Initiate a series of booklets called *Profiles of Louisville*. Choose one individual from each Metro Park Master Plan and complete a more thorough biography of their life, influences in their development, and their influence on Louisville. For the JMF, this may include one of the namesakes such as Paul Yost or Tom Wallace or a representative individual from an early family such as a Caple, Field, Blevins, Snawder, or Mitchell. As the *Profiles* booklets are completed for the parks, they should be representative of a variety of cultural landscapes, an echo of Rademacher's (2004) identification of Olmsted's original parks as representative of the natural landscapes of Louisville: Cherokee Park's stream to ridgetop topography, Shawnee Park's floodplain topography, and Iroquois Park's knobs topography.

- Genealogical Information: Begin and maintain a genealogical database of families who settled the area. Include information about cemeteries located in and around the JMF. Foster a relationship with area genealogists and sponsor workshops for or by them. This might be coordinated with the Louisville Genealogical Society or Bullitt County Genealogical Society. The work of area genealogists could be displayed at exhibit space within the Visitors' Center or in a travelling exhibit. Their books and research could be made available at the gift shop.

- Driving tour: prepare a pamphlet and map guiding the public on a driving tour of the forest, pointing out locations of historic or local interest. Interpretive material might describe the Mitchell family at a location near the Welcome Center or the Horine family near the Manor House. Once locations of the bear camp, tannery, and sawmills are identified through archaeological survey, industries associated with them might be interpreted.

- Trails: Incorporate signs presenting information on the cultural heritage of the forest, both historic and prehistoric. These may highlight temporal periods such as the Late Archaic or the chert and botanical resources used by past cultures.

- Exhibit Space: Artifact and photo displays of the cultural heritage of the area could be prepared for exhibit within the Visitors' Center. As new displays are completed, the others could be moved to display areas off-site such as library branches or area museums.

- Travelling Exhibit: A travelling exhibit could be used to reach a wider audience. The exhibit could be used in exhibit spaces at area libraries or at area festivals such as at Riverside, the Farnsley-Moremen Landing or Bernheim.

- Informative displays in honor of namesakes of recreational areas (e.g. Tom Wallace and Paul Yost) could be completed for the Visitors' Center, the website, and for display off-site.

- Information on Veterans: Throughout 2008, obituaries in the *Courier-Journal* have documented the loss of area veterans, particularly those that served in WW II. A summary of veteran numbers in Jefferson County could be totaled and prominently displayed at the Welcome Center. This should be kept current. In

addition, a page on the website could be devoted to area veterans, which could be updated frequently with brief biographies of individuals.

- Displays related to the wartime Camp Taylor occupation near the forest could be developed to be used at the Visitors' Center Exhibit Space or as part of the travelling exhibit.

- The Louisville community supports a vibrant community of filmmakers, playwrights, sculptors, painters, and other artists. Initiate a work regarding an aspect of the culture history of the JMF that could be aired on KET, displayed at area galleries, or performed at local venues such as the Iroquois Amphitheater.

Programs

- Slide Show/Video: Prepare a slide/video presentation for the Visitor Center or outdoor interpretive programs on the rich prehistoric and historic heritage of the forest.

- Classroom Programs: Expand the current archaeological hands-on artifact program with additional activities and artifacts, both historic and prehistoric.

- Heritage Weekend: Plan a weekend public event to celebrate the history of the forest. Activities could include historic re-enactors, historic arts and crafts, storytelling, cooking; prehistoric artifacts displays and hands-on activities (pottery making), Native American dancers, guest speakers, vendors, etc.

Resource Protection

- Place signage in the forest alerting the public to the fact that collecting artifacts on public land is a violation of the law.

- Place notice on all maps and public materials stating the importance of intact cultural resources and alerting public to the fact that collecting artifacts on public land is a violation of the law.

- Educational program that informs public of why it is important not to dig or collect in the forest. Educational materials could be located off-site at area stores such as The Trail Store and Quest Outdoors.

- Monitoring for erosion along trails and stream banks that intersect archaeological sites should be completed seasonally. Any erosion should be addressed with methods that do not harm the archaeological site.

- The rural character of the area is important to the culture of the area. There are many management tools available to enable this preservation. These include appropriate zoning districts, land development codes, form districts, preservation districts, agricultural preservation districts, local landmark designations, and parkways and scenic corridors. The JMF should work with these initiatives when appropriate.

- The preservation of the historic built environment should be encouraged with workshops and information pamphlets regarding local, state, and federal tax incentives for historic building preservation. These may include the 2005 state-level incentive for rehabilitation incorporated in the JOBS for Kentucky Tax Modernization Plan. Federal tax incentive programs may be found at the NPS website: http://www.nps.gov/hps/tps/tax/index.htm

- Paul Yost envisioned a sustainable use of Jefferson Memorial Forest. Sustainability has likewise hit a high note in the planning processes of the new century, particularly with regard to historic preservation. Reuse of buildings such as Mitchell School for the Welcome Center fits right in with 21st Century ideals of green development and, more importantly for future generations, sustainable use of the cultural as well as natural resources of the forest. Future management decisions should continue to emphasize sustainable development and adaptive reuse.

- Cultural resources include not only historic properties, artifacts, features, and communities but also the documentation for those sets. Update curation standards for archived material, including acid-free boxes and file folders, as well as updated media files.

- Continue to nurture a vision of the forest not only as a compilation of patches of natural resources but also as a vibrant web of cultural landscapes. All management decisions regarding the natural resources should consider these cultural landscapes as well. NPS *Technical Preservation Brief 36: Protecting Cultural Landscapes* may aid this process.

Long-range Requirements

- Inventory

    - Record known but currently unrecorded archaeological sites with the Office of State Archaeology, University of Kentucky. Confirm site locations identified by informants, such as the reported locations of sawmills, tanneries, firing ranges, past ranger stations, lodges, and base housing.

    - Conduct a Phase I archaeological survey of the forest to compile an inventory of previously unidentified archaeological sites. Tracts acquired since the 1981 survey, which includes approximately 3,968 acres, have never been surveyed. Much of this survey would cover steeply sloping landforms and therefore be low probability areas for site locations. Survey strategies could take this into account. More extensive survey could be conducted on ridgetops and in valleys.

    - Conduct a literature review of old homestead sites and examine these areas in the field to identify potentially significant historic archaeological sites.

- Cemeteries: Relocate the small family cemeteries within the forest and ensure the gravesites are maintained and stones repaired. Inscriptions should be fully recorded. Use GPS to verify location of each interment. Enter data into Roots Web and provide data to Historic Landmarks and Preservation Districts Commission. In particular, veterans' graves could be identified, marked, and noted at the Welcome Center.

- Inventory possible TCPs in the area of the JMF by beginning a dialogue on the issue with area residents and other interested parties. Should Buttonmold Knob be added to the JMF, the possibility of its identification as a TCP for a local Cherokee group should be addressed. One first step in this process may be a program patterned on the heritage landscape program of Massachusetts (http://www.mass.gov/dcr/stewardship/histland/Inventoryprog.htm). This program fosters community participation in defining aspects critical to defining their own character. The program is also seen as a link between historic preservation and SmartGrowth initiatives.

- Site Evaluation

  - Conduct archaeological evaluations of the known sites located on the forest. Eligibility for listing in the National Register of Historic Places should be evaluated and sites should be nominated to appropriate local or state lists. This is a management issue, however. Archaeological sites that are evaluated and found to be insignificant require no further consideration or protection under the law.

  - Evaluation by an architectural historian of any newly acquired structures. Data should be provided to Historic Landmarks and Preservation Districts Commission, and properties should be nominated to appropriate local and state lists. Eligibility for listing in the National Register of Historic Places should be evaluated.

  - Evaluate effects of forest management practices, such as prescribed burns and tree planting, on cultural resources.

- Further Research

  - The data from the JMF are valuable not only as a basis for management decisions, but also in crafting future research questions for this or similar areas such as Otter Creek Park, Fort Knox, and Hoosier National Forest. Variations in landuse from upland to midslope region to lowland based on socioeconomic status, genealogical connections, and environmental constraints could be examined further. Persistent places such as quarry locations, spring sites, fertile level agricultural land, and cross roads could be identified. The resulting palimpsest of archaeological patterns occurring at these locations could be identified, documented, and studied.

  - Oral history project: many of the family lines have continued since the nineteenth century or even eighteenth century. The memories associated

with the cultural resources are just as important to document as the structures. Adam King's oral history of Mabel Colvin is one example that could be followed. Quotes and copies of old pictures could be displayed at the Welcome Center to provide a glimpse of past activities at the JMF. This collection of stories and photographs could be published as a monograph to be maintained on file at the Fairdale Library.

- Explore the agricultural context of farms in the JMF area and compare to other works such as the Agriculture in Louisville and Jefferson County, 1800-1930 context found within the NRHP Louisville and Jefferson County, Kentucky Multiple Property Listing. The context can be found at http://www.nr.nps.gov/iwisapi/explorer.dll?IWS_SCHEMA=Cover&IWS_LOGIN=1&IWS_REPORT=100000008 Property types "Gentleman Farm" and "Middle Class Farms" were defined herein, but it may be necessary to define additional property types for the JMF area. Documentation of garden as well as crop and livestock species will provide a more detailed context of food products and nutrition important to area residents. Documentation should include traditional food storage techniques such as canning, smoking, and salting.

6
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Appendix A

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Figure 85. Locations of recorded prehistoric sites in the JMF.

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Figure 86. Additional locations of recorded prehistoric sites in the JMF.

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Figure 87. Location of final recorded prehistoric site in the JMF.